The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 328. --Vol. XI.] LONDON: SATURDAY, DECEMBER 4, 1841. [Price 6d.

MINES AND MATERIALS IN IRELAND FOR SALE.

TO BE SOLD, BY AUCTION, by the board of directors of the MINING COMPANY OF IRELAND, on Tuesday, 7th December, at Derrynoos Lead Mines, near Keddy, county Armagh, a steam pumping-engine, cylinder 30 in. diameter, stroke 8 feet, cylindrical boiler, with tube, weight 9 tons, capstan, connecting-rods, and 40 fathoms of pitwork complete, with other materials for mining purposes.—Also, the leases of the mines extending over sixteen townlands, held at a nominal rent of £46 3s. 1d. per annum, under his Grace the Lord Primate—a most liberal landlord.—Also, the lease and goodwill of the mines within twenty-eight townlands of the estate of Trinity College, adjoining the above, upon which the company has expended a considerable sum in opening ground and erecting machinery.

For further particulars apply to the resident agent, Mr. William Petherick, or to the undersigned. By order,

Dublin, Nov. 4. RICHARD PURDY, Secretary.

HOUSEHILL COAL AND IRON-WORKS FOR SALE.

TO BE SOLD, BY PUBLIC ROUP, within the Saracen's Head Inn, Paisley, upon Thursday, the 16th day of December, at One o'clock in the afternoon, the whole HOUSES and IRON-WORKS at Nitshill, together with the right and benefit of a lease of the MINERALS in Househill Estate, and the machinery and utensils connected with the different works, consisting of two furnaces, blowing engine of 70-horse power, capable of working three furnaces, heater, pipes, ovens, two pumping and winding-engines, of 20 and 12-horse power, with pumps and winding machinery, &c., &c., together with the workers' houses, offices, smith and wright's shops. The ground on which the iron works and houses are erected is held free, and extends to seven acres or thereby. The lease of the minerals is for twenty one years, commencing when the main seam of coal should be reached in the new pit, and includes nearly all the minerals in Househill estate, which extends to 310 acres; these minerals are ironstone, alum ore, copperas ore, fire clay, limestone, and coal. The seams of alum and copperas ore lie above the main seam of coal, and so can be worked along with it at low rates. The main seam of coal, which is called the Hurlet coal, has been reached by a bore, and found to be fully five feet thick, is well known in the district as being a peculiarly rich engine coal, and the one from which nearly all the steam-engines for five miles round are supplied. Besides the main coal, there are several smaller seams, from seventeen to thirty-six inches in thickness, of an excellent quality for domestic purposes, and also for the smelting of iron. The coal-field has been examined by two eminent engineers, who report most favourably of it. The lordships upon the different minerals are as follows:—

On riddled coal	6d. per ton.
„ Dross	1½d. per ton.
„ Unriddled coal, average—say from	4d. to 4½d. per ton.
„ Alum and copperas ore	10d. per ton.
„ Calcined ironstone	2d. per 22½ cwt.
„ Limestone	1s. per chaldron.
„ Fireclay	4d. per ton.

The expense of working unriddled coal in Victoria pit, from the main or Hurlet seam, will not exceed, including lordship, 2s. 8d. per ton. For the last five years the selling price of this coal has averaged 6s. 1½d. per ton at the pit mouth. The whole works were recently erected, and the machinery and utensils are nearly new, and all in excellent working order and condition.

For further particulars apply to William Hodge, writer, 5, Moss-street, Paisley, who is in the possession of the title deeds, articles of sale, engineers' report, and inventory of the machinery and utensils.

Paisley, Nov. 10.

THE CELEBRATED WHEAL VOR MINES, IN CORNWALL.

TO BE SOLD, BY AUCTION, on Tuesday, the 21st day of December instant, by Three o'clock in the afternoon, at the Star Hotel, in the borough of Helstone, in several lots, FOUR TWO-HUNDREDTH SHARES in the far-famed TIN and COPPER MINES, called WHEAL VOR, in the parish of Breage, Cornwall, the machinery on which alone is worth between £50,000 and £100,000.—Wheal Vor is too well known to require a lengthened recommendation; it is enough to state, that the immense quantities of ores raised, amounting at one time to one-fourth of the tin produced in Cornwall, caused the adventurers to erect smelting-houses on the mine, and smelt the tin, and more than £114,000 profit has already been divided among the adventurers. The whole mine is in a most efficient state of working; the lode from which the chief part of the ore has been raised is as rich and productive as it ever was, and the sett of that part has lately been renewed on advantageous terms. The present, therefore, is a rare opportunity of investing capital with perfect safety, in what is often a hazardous speculation.

For leave to inspect the mines, application may be made to the purser, John Silvester, Esq., Helstone; or to the clerks or captains at the account-house on the mine; and for other particulars to Messrs. Millett and Borlase, solicitors, Penzance.

Dated Penzance, December 1.

TO ENGINEERS, MACHINE MAKERS, OR CAPITALISTS.

TO BE SOLD, BY PRIVATE CONTRACT, a FOUNDRY, FORGE, ENGINE, and BOILER MANUFACTORY, situate in a mining district of great importance. This concern is now in full operation, and will be sold with immediate possession, if desired. The purchaser will obtain the goodwill, and a steady demand, at a fair price for certain work required by the present owners. The premises, machinery, and the tools, are nearly new, and in perfect order. The power required is given by a considerable stream of water, which, together with the land, buildings, offices, and a dwelling-house, are held at a very moderate rent, upon a lease of which thirty-eight years are still unexpired. Coal and iron abound in the immediate neighbourhood, and the costs of both, as well as of manual labour, are low. The whole concern will be disposed of upon very moderate terms, and is well deserving of the attention of engineers or capitalists disposed to embark in a compact and well-established business of this kind.

Further particulars may be obtained upon application to Mr. John Taylor, 2, Duke-street, Adelphi, London; or to Mr. John Taylor, jun., Coed-dw, Moid, Flintshire.—November 4.

MINE SHARES FOR SALE.

TO BE SOLD, TWO 100TH SHARES in ROSEWALL HILL MINE, in the county of Cornwall; the lodes of St. Ives Consols Mine, which are well known to have been very productive, and are still paying the adventurers large profits, run through Rosewall Hill Mine; Wheal Reeth Mine, which has been equally productive with St. Ives Consols, is also in the immediate vicinity. The Rosewall Hill Mine, on which ample machinery, on the most approved principle, has been recently erected, is sunk to a sixty fathom level below the deep adit, and is now in full course of working, with every prospect of success.

For particulars, apply to Mr. William Bawden, 2, Bank-chambers, London.

COPPER MINES FOR SALE.

TO BE SOLD, TWO MINES, situated in the county of Merioneth, North Wales, very conveniently situated for the shipment of ores, of which a considerable quantity has already been raised and sold at Swansea. The right of raising ores extends over a very great extent of country; a considerable sum has been laid out, and the property and machinery are now offered on most advantageous terms. For particulars apply to Messrs. Aston and Wallis, solicitors, 2, New Broad-street, London.

SLATE QUARRY FOR SALE.

TO BE SOLD, a moderate-sized SLATE QUARRY, situate in the county of Merioneth, North Wales: there are workmen's cottages, machinery, and the necessary buildings for carrying on the same. The quality of slate is excellent for slabs and other purposes. A considerable sum has been expended. The above can be offered on terms very advantageous to a capitalist disposed to engage in such a concern.—For full particulars apply to Messrs. Aston and Wallis, solicitors, 2, New Broad-street, London.

FORGE AND MILL AT LIVERPOOL.

TO BE SOLD OR LET, those spacious and eligible PREMISES situated in Oxford-street, Vauxhall-road, called the VAUXHALL FORGE. The machinery is completely fitted, and with working tools ready for use. The works comprise shingling and drawing-out hammers, puddling, balling-mill furnaces, and a chaffry, a 14 and 8 inch train of rolls and a guide train, three pair of shears, two cranes, and whatever is required to manufacture uses, and bars. The whole is driven by an engine of 40-horse power, to which two boilers are attached. There are excellent office rooms, scrap house, smiths' and joiners' shops, lodge, weighing machine, &c., &c., forming altogether a complete establishment. There is always an abundance of good scrap to be had on the spot at a reasonable rate. Liverpool is allowed by competent judges to be one of the best situations in the kingdom for manufacturing superior descriptions of iron.—Apply to the owner, John Waring, Lydia Ann-street, Liverpool.

BLAENDARE COLLIERY, near Pontypool.

TO BE LET, and entered upon at Christmas next, all that well-known COLLIERY, called the BLAENDARE COLLIERY, with the several VEINS of COALS and IRONSTONE now in work, and which will be let upon a reasonable galeage, and for a term of years, together with the tram waggons and canal boats.—Likewise, a BRICK MANUFACTORY complete, with WATER-WHEEL for grinding clay, and driving stones, &c. The clay is got within sixty yards of the manufactory, and is of the very best quality. The tenant may have the option of renting the Blaendare farm, consisting of 80 to 100 acres of rich meadow and pasture land, together with an excellent cottage residence upon it, and good outbuildings adjoining thereto. The workmen's cottages to be taken at a yearly rent. There is a meadow called the "Boat-house Meadow," adjoining the Monmouthshire Canal, in which there is a dry dock for building and repairing canal boats, and a good office and two cottages on the same, which will also be let with the colliery. A respectable tenant will meet with every encouragement.

For further particulars apply, either personally or by letter, to Mr. John Maund, Blaendare Cottage, Pontypool.—November 19.

TO ENGINEERS, FOUNDERS, MACHINE MAKERS, STEAM-SHIP BUILDERS, AND OTHERS.

FOR SALE, an extensive and valuable MANUFACTORY, for the construction of STEAM-ENGINES, BOILERS, GENERAL MACHINERY, CHAIN CABLES, ANCHORS, FOUNDRY GOODS, FORGED GOODS, and GENERAL BLACKSMITH WORK, well-known as the FOOTDEE IRON-WORKS, Aberdeen.—These works occupy nearly four acres of freehold ground, at a very moderate fen-duty or ground-rent, and are situated at Footdee, in the populous city of Aberdeen, within 300 yards of the Harbour quay. The engines, boilers, and machinery of several of the large class of steam-ships have been wholly constructed and fitted up at these works, which afford unusual facilities to parties engaging in that branch of business, and such as exist in few other establishments in the United Kingdom. The foreign and coasting trade of the port of Aberdeen is very extensive, and has rapidly increased for several years past, whilst the steam trade to London, Hull, Leith, Inverness, Orkney, Shetland, &c., is carried on to a very considerable extent.

Immediately adjoining the ironworks, and belonging to the same proprietors, is an extensive ROPE, SAIL, and FELT WORK, which will also be DISPOSED OF, either with or without the ironwork, as may be agreed upon. To a party desirous of engaging in the building and equipping of steam or sailing vessels, the construction and repairing of steam-engines, sugar-mills, and general machinery, these works, from their local situation and peculiar facilities within themselves, will be found particularly well adapted. The whole of the buildings are substantial, commodious, and suitable for the respective trades carried on within them. The machinery is of the first class, and in excellent order, the whole having been erected at considerable expense. In the meantime, the whole will continue to be carried on in all its branches, and orders executed as usual.

A plan and specification of the premises have been printed, which may, with all particulars and further information upon the subject, be had upon application to Messrs. Johnston and Farquhar, solicitors, London; John Jopp, Esq., W.S., Edinburgh; or Messrs. Jopp and Shand, advocates, Aberdeen, in whose hands the title-deeds of the property are.

TO ENGINEERS, PATENTEES, CONTRACTORS, AND BUILDERS.

STEAM-ENGINES ON SALE OR HIRE.—C. H. CAPPER, Iron Founder, Manufacturer of Steam-engines, Sugar-mills, and Mill Machinery, Broad-street Foundry, Birmingham, has ENGINES from 6 to 20-horse power always on hand, and any parties wishing to hire new or second-hand ones for a given time, to try experiments, &c., may have the same at work immediately, and upon the most moderate terms.—For particulars apply as above.

STEAM POWER.—The BIRMINGHAM DISC ENGINE COMPANY request the attention of the public to their ENGINES, which are particularly suited for all kinds of mills and manufactories wherein steam power is required; for raising minerals and water from mines; for the application of steam power to agricultural operations; to drive sugar mills; and to draining fens. Disc engines have been employed in these various applications for a continued period, and their use has fully proved that they possess most important advantages as compared with engines of the old construction. These advantages are founded on the small space occupied by the engine, the simplicity of its construction, and consequent reduced liability to get out of order; and they consist in a large saving in the first cost of engine power, a most important economy in fuel, and a great reduction in the constant expenses of wear and tear.

Full particulars of prices, with references to engines at work, will be forwarded (post free) on application to the Disc Engine Company, Berkeley-street, Birmingham.

STEAM-CARRIAGE AND WAGGON COMPANY.—The directors beg to announce, that, in pursuance of a resolution passed at a General Meeting of shareholders, held at the Freemasons' Tavern, on the 11th November, they are ready to receive PROPOSALS from persons willing to supply STEAM-CARRIAGES for the conveyance of goods or passengers on turnpike-roads. Parties proposing to supply carriages must produce one in a state fit for work, to be submitted to such test as the directors may require, and, if approved, arrangements for the construction of several for the use of the company will be immediately made. All communications should be addressed as under.

Offices, 18, Moorgate-street, City. By order of the board.

SMOKE NUISANCE.—ECONOMY OF FUEL WITHOUT THE NUISANCE FROM SMOKE, by C. W. WILLIAMS'S AIR FURNACE.—The principle of this furnace consists in the mode by which the air is introduced to the gaseous matter evolved from coal, whereby a more perfect combustion of the constituents is effected, the process being conducted on true chemical principles, as explained by Mr. Williams, in his *Treatise on the Combustion of Coal*. A furnace constructed on this principle may, by permission, be daily seen in action at the Liverpool and Harrington Water-works, Soho-street, Liverpool.

For further information, apply to Dircks and Co., agents; to Wm. Routledge, engineer, 38, Princes-street, Manchester; or to Mr. C. W. Williams, Liverpool.

LONDON AND BIRMINGHAM RAILWAY.—CALL OF TEN POUNDS (being the second) on the £25 shares, making £15 per share called for.—The directors of the London and Birmingham Railway Company having resolved that a SECOND INSTALMENT of TEN POUNDS per share, payable on or before the 10th of January, 1842, should be called for on the £25 shares of this company, the proprietors of such shares are hereby required to pay, on or before the appointed day, to any one of the undermentioned bankers, the sum of £10 on each of their respective shares, viz.:—

London—Messrs. Glyn and Co., 67, Lombard-street, or at the office of the railway company, Euston Station.

Birmingham—Messrs. J. L. Moilliet and Son, or the Birmingham Banking Co.

Liverpool—The Bank of Liverpool.

Manchester—Messrs. B. Heywood and Co., or the Bank of Manchester.

The bankers have been severally instructed to charge interest, at the rate of £5 per cent. per annum (according to the provisions of the Act of Incorporation), on all sums which shall be tendered after the 10th of January, 1842.

GEORGE CARR GLYN, Chairman, } of the Board of
J. F. LEDSAM, Deputy-Chairman, } Directors.

Office, Euston Station, Nov. 12. By order, R. CREED, Sec.

WEST WHEAL JEWEL MINING ASSOCIATION.—Notice is hereby given, that a further CALL of TEN SHILLINGS per share has been made in conformity with the Deed of Settlement, payable on or before the 31st of December next, into the London and Westminster Bank, to the credit of the association; with the Western District Banking Company, Truro; or into the bank of the said company, at Truro. By order of the board,

23, Threadneedle-street, November 30. ROWLAND NICHOLSON, Sec.

THE PATENT SAFETY FUSE, FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the safest, cheapest, and most expeditious mode of effecting this very hazardous operation. From many testimonies to its usefulness with which the Manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c., &c.:—

"I am very glad to hear that my recommendations have been of any service to you. They have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall.

ANDREW SMITH'S PATENT WIRE ROPES, for standing rigging, lightning conductors, stropping of blocks, mining, railway, and general purposes; about half the size and weight of hempen ropes, and 25 per cent. cheaper. Testimonials to that effect, with specimens, may be seen, and every information obtained, at the office, 37, New Broad-street, city; manufactory, Mill-wall, Poplar; and also of the following agents:—

Robertson and Co., 12, Goree Piazzas	Liverpool.
Matthias Dunn	Newcastle-on-Tyne.
Joseph Bothway	Plymouth.
John Thompson and Co.	Wigan.
J. T. Tregellas	Truro.
Thomas Mooney and Son	Dublin.
Perrin and Nolan	Wicklow.
Coates and Young	Belfast.
James Kibble and Co.	Glasgow.
James Gunn	Leith.
J. M. Beatts, Clements's-lane, High-street	Dundee.

ANDREW SMITH'S PATENT WIRE ROPE.

This rope has been in use for standing rigging in her Majesty's Navy, and in a great number of merchant vessels, for upwards of six years, and is giving the highest satisfaction; the rope is also employed in various mines and railways in different parts of the kingdom.

THE INVENTORS' ADVOCATE, AND JOURNAL OF INDUSTRY; a WEEKLY BRITISH and FOREIGN MISCELLANY of SCIENCE, INVENTIONS, MANUFACTURES, and ARTS, is the most useful and comprehensive work of the kind published. It contains the scientific intelligence of the week; correct information on railways and steam navigation; list of patents granted and expired; specifications and descriptions of new inventions; reports of scientific meetings, and original papers on manufactures and the arts; with a variety of information interesting to inventors and patentees. It is not only a journal of interest for the day, but forms a standard work of reference, valuable to persons engaged in scientific, manufacturing, and mechanical pursuits. Vols. 1, 2, 3, and 4, neatly bound, are already published, and the 5th Vol. is now in course of publication.

The *Inventors' Advocate*, price Fivepence, postage free, is published weekly, by the proprietors, at the patent office, No. 166, Strand, London.

ON THE MORAL, RELIGIOUS, AND ECONOMICAL USES OF GEOLOGY.

BY JOHN CRAIG, ESQ., M.E.,

VICE-PRESIDENT OF THE GLASGOW GEOLOGICAL SOCIETY.

An inquiry into the ancient conditions of our planet must be replete with interest to a philosophic mind, because such an investigation opens up a source of contemplation, by which not only the higher faculties of the reasoning powers are called into operation, but a train of reflection excited, calculated to gratify our love of that which is venerable for its antiquity, wonderful for its vastness, and sublime, inasmuch as it reveals the operations of that unseen Power, whose "outgoings were of old, even before the foundations of the earth were laid."

The present aspect of the earth shows it to be well adapted for the sustenance of the various tribes which exist upon its surface. Pain and death there undoubtedly is, but without these the present economy of Nature could not exist. Of another economy we have no notion, and, therefore, pain and death are necessary, and their existence in harmony with the great plan of Universal Providence and Wisdom. Pain and death are inseparable from the human constitution, and essential to the destinies of the race—the reproduction of the species—the preservation of all the attachments which endear us to each other—and to all the mental and moral improvements which adorn humanity. However annoying the presence of the one, or melancholy the approach of the other, the philosophic mind regards either—though the daughter of a stern necessity—as the decree of Infinite Wisdom and Goodness, and learns, with becoming reverence, to submit. A consideration of the history of animal life in the ages that preceded the creation of man, tends powerfully to remove the idea that death is the result of a malediction pronounced against man and his contemporaries, for, from the first introduction of animated being upon the surface of the earth, the same economy of birth, youth, maturity, old age, and death has prevailed, and man, though nobler in faculties than the rest, differs nothing in his construction naturally, by which the possibility of the common fate could have been avoided. Geology, therefore, serves a very high moral purpose, in disclosing to us the uniformity of the economy of Nature prior to the production of the human species and at the present day.

It may seem a matter of no consequence whether the world has existed as it is since it became a planet, or has been the theatre of many vital and physical revolutions—whether the earth has existed six thousand or six millions of years. We are aware that there are some minds who "care for none of these things," but is this indifference justifiable? Does it become a being gifted with a mind capable of understanding and admiring the workmanship of his Maker? No one who is not altogether "of the earth, earthy," will say so; the *mens divinior* rises with indignation at the imputation, and reckons it the highest glory and privilege to be permitted, as it were, to approach the great arcano of Nature, and to behold new orders of beings arising from time to time at the Divine command. Till geology disclosed its wonders, the materialist was heard to assert that the earth, and the beings who inhabit it, may have existed from all eternity, and to deny the possibility of a Creative power. The natural theologian may now boldly appeal to recorded fact, as disclosed in the archives of the earth—in those mausoleums, or charnel-houses, of the extinct myriads of the former inhabitants of the globe, and comparing the relicts of one era with those of another, defy the proof of any of the present tenants of the earth having existed in its earlier age; and at the same time clearly demonstrate the fact, that the inhabitants of one geological period as decidedly differed from those of another as they do from those of the earth at the present time; and if so, may he not as justly conclude that the plants and animals of each particular period were the offspring of Creative wisdom and contrivance? The permanency of species is one of the most positive laws of Nature; the idea, therefore, of new species springing from old is absurd and untenable—for what reason can we have for supposing that the monsters of the Old World were more gifted than their sterile analogies of the present time? And, we would ask, what is there in any given quantity of inert matter in any combination of the fifty-four known substances which enter into the composition of terrestrial matter, however acted upon by the laws of chemical affinity or galvanic influence, that could produce such a piece of splendid and complicated machinery as man? What originally arranged the skeleton, and adapted it as a piece of exquisite architecture for the furniture with which it was afterwards to be provided? What clad it with muscular fibre? What strung it with nervous tissue? What clothed it with skin, and furnished it with all their delicate apparatus—the organ of the eye, the ear, and the other senses? and, What endowed the complicated being with the high capacity of thought? From the nature of man he could not exist, as an infant, in a world where there was none to care for him or minister to his wants; he must, therefore, have sprung into being in the full maturity of his physical powers, and, for the sake of reproduction, a female must have stood beside him, fresh from her Maker's hand. In the fact, then, that there was a time when man did not exist, we arrive at the truism that there was a time when he began to exist; and as he could not exist in an imperfect state, he was created in the vigour of manhood—and thus might we reason with respect to the whole tribes of animated nature. Geology, then, distinctly demonstrates the existence of a Creator, possessed of infinite skill and almighty power—consequently, demonstrates the being of a God, and, therefore, above all other sciences, instead of being reprobated as inimical to piety, ought to be regarded as ministering that knowledge of the Deity which His works are intended to unfold, and those feelings of reverence which a perception of His wisdom and power are calculated to impart.

To the mind already imbued with the love of external nature, geology is most important, as adding vastly to the pleasure it derives from the beauties or sublimities of surrounding scenery. In the fairy dell, where a thousand wild flowers, springing from the velvet sod, have attracted our attention and excited our admiration and love, how often has the feeling been diversified by some jutting crag, from which we could extract "St. Cuthbert's beeds," and discourse on the beautiful forms the crinoides must have presented in the waters of the primeval deep, or in a little piece of shale, washed down by the tiny streamlet; how often have we met with the most beautiful impressions of the fern, the segillaria, and lepidodendra of a former world, and, in gazing on them, conjured up the tropical grandeur that once invested even the now rugged, yet lovely, scenes of our native land. Place the geologist on the sea-shore—on the cliffs washed by the angry surge—he beholds a type of the changes which its billows have produced—he traces their ancient levels, and contemplates the time when the fair fields of England were immersed under the briny foam, or presented on the bosom of the deep little islands, on which crocodilians of enormous size loitered under the rays of a summer sun; or, at a period less remote, when these islands had increased in size, and instead of the cycas, the zamias, and the palms, and the loitering crocodiles of former ages, Old England was clad with grassy hill and dale, adorned with the oak, the elm, and the pine, intermingled with the palm—among the shades of which, and in the surrounding swamps and jungles, the unwieldly elephant, the tapir, the rhinoceros, and the lion, held each his respective den; or let the geologist roam amidst the Alpine scenery of the north—witnessing the awful chasms, the steep declivities, and the towering pinnacles of the mountains, with the sublimity of scene he contemplates the still sublimer causes which produced the ruggedness—he beholds "the wreck of matter and the crush of worlds." In short, wherever the geologist is, he finds objects to amuse and instruct him—the very pebble upon the footpath tells him of the action to which it had been subjected, and, probably, of the long journey it has performed since dissevered from its native rock

—the undulations of the surface, the scooping out of valleys, the elevation of hills—all are objects that arrest his attention, and render his travels, doubtless, more delightful than his who, in the receding landscape, can merely witness the effects of light and shade, and the harmonious colouring of Nature.

The utilities of geology, in an economical point of view, are as also sufficiently apparent. Geology is important in this respect, whether we apply it to the culture of the soil or to the mineral products underneath. The farmer who knows the properties of soils will, if a geologist, in selecting a farm, take the nature of the rocks of a district into his immediate consideration, for we may as well expect "to gather grapes from thorns and figs off thistles," as to reap rich crops where sand or clay constitutes the chief ingredient of the subjacent rocks; on the other hand, he will seek a farm where these contain the requisite qualities of a fruitful soil—a proper admixture of sand, clay, and lime. Geology furnishes him with this information; but, of all others, geology is most important to the miner. Does he want coal, if a geologist, he will as soon seek for it in the clouds as in certain formations; but if not so informed, he may waste, as many have done, a fortune in fruitless research—examples of this kind are too common and too well known to need to be mentioned; or, does he expect to find a metallic lode, he will not seek for such except in the older strata of limestone, slate, or greywacke, &c.; and when either coal or ore is found, the miner will find a knowledge of the principles of geology of the greatest importance, in enabling him to trace the bearings and to calculate the effects of veins, faults, dykes, &c. For these reasons, we intend to furnish our readers with a series of articles on geology, as a theoretical and practical science, combining, at the same time, all the recent knowledge obtained into the physical and palæontological departments of this interesting and delightful branch of human knowledge.

NEW PATENTS FOR NOVEMBER.

Robert Holt, cotton spinner, Manchester, and Robinson Jackson, engineer, Manchester, for certain improvements in machinery, or apparatus for the production of rotary motion, for obtaining mechanical power, which said improvements are also applicable for raising and impelling fluids.

William Brunton, engineer, Neath, Glamorganshire, for an improved method or means of dressing ores and separating metals or minerals from other substances.

Henry King, engineer, Webber-row, Westminster-road, for certain improvements in steam-engines and boilers.

Jules Lejune, manufacturing chemist, North-place, Cumberland-market, for a means of condensing and collecting the sulphurous and metallic vapours which are evolved in the treatment by heat of all kinds of ores.

Job Cutler, gentleman, Ladypool-lane, Birmingham, for improvements in the construction of the tubular flues of steam-boilers.

Henry Davies, engineer, Birmingham, for certain improved machinery suitable for applying power to communicate locomotion to bodies requiring to be moved on land or water.

William Edward Newton, civil engineer, Chancery-lane, for certain improvements in the production of ammonia—being a communication.

George Allarton, surgeon, West Bromwich, Stafford, for certain improvements in the method of balling and blooming iron.

Edward Joseph Francois Duclos de Boussois, Clynewood Metallurgical Works, Swansea, for improvements in the manufacture of copper.

John Onions, engineer, Field-lane, Barlaston, Stafford, for improvements in the manufacture of certain descriptions of nails, screws, and chains.

James Young, chemist, Newton-le-Willows, for certain improvements in the manufacture of ammonia, and the salts of ammonia, and in apparatus for combining ammonia, carbonic acid, and other gases with liquids.

Henry Mortimer, gentleman, Frith-street, Soho, for improvements in covering ways and surfaces, and in constructing arches.

John Squire, engineer, Albany-place, Regent's-park, for certain improvements in the construction of steam-boilers or generators.

Robert Sterling Newall, wire rope manufacturer, Gateshead, Durham, for improvements in the manufacture of flat bands.

SPECIFICATIONS OF RECENT PATENTS.

John Grafton, civil engineer, Cambridge, for an improved method of manufacturing gas, Nov. 4.—The retorts used in this method are built of fire-bricks in the form of an oven, being divided by a central transverse partition, so as to form a double retort; there is a furnace under each end of the retort, and the ends are fitted with doors, &c., in the usual manner. Extending over the whole of the retort is an arch, called a heat-retaining arch, furnished with two apertures, leading into a space above the arch which communicates with the flue. From these retorts the gas passes to another retort, called a decomposer, in order to free it from impurities. The decomposer is provided with a heat-retaining arch the same as the other retorts, and is divided into four chambers, by three longitudinal brick partitions, reaching from the top of the retort to the bottom. The first chamber is occupied by a series of small transverse metal divisions, descending from the top of the retort to within one-third of the whole height from the bottom; the other chambers are filled with red-hot coke or charcoal. The gas enters the decomposer at the front of the first chamber, and after passing through the whole of the chambers, by means of openings at either end of the partitions alternately, is drawn out through an exit pipe in the front of the last chamber, by means of an exhausting apparatus connected with the pipe. In the exit pipe, between the decomposer and the exhausting apparatus, a shield of fine wire gauze is placed, to prevent accidents from the ignition of the gas in the different pipes connected with the retorts and with the exit pipe. Any suitable exhausting apparatus may be used.

The patentee claims, 1st, the manufacturing of gas in double retorts, arranged in the manner described. 2d. The increasing the heat of such retorts by the application of a heat retaining arch, as described. 3d. The passing of the gas through a decomposer, either detached or combined with the retort. 4th. The application of an exhausting apparatus to the decomposer, to facilitate or compel the passage of the gas through the said decomposer; together with the wire-gauze guard, interposed in the pipe, between the exhausting apparatus and the decomposer.

THE SMOKE NUISANCE—MR. C. W. WILLIAMS'S PATENT.

Our readers are aware that Mr. Williams recently erected a furnace on his approved plan in Manchester, for the purpose of enabling the inhabitants of that populous manufacturing neighbourhood to inspect its successful adaptation to the purposes for which it is intended; we now understand that most of the public authorities, together with several eminent engineers and other parties interested in the application of this important invention, have visited the specimen furnace, and acknowledged its complete efficacy in the combustion of smoke and economising heat. The following satisfactory communication has been made to Mr. Williams's agent by Lord Francis Egerton:—

Worsley, Nov. 22.

SIR,—Having this morning inspected the invention for the prevention of smoke, of which Mr. C. Wye Williams is the patentee and yourself the agent, I am anxious to bear my testimony to its very palpable success in the attainment of its main object. How far its secondary and collateral purpose of saving fuel may be effected, and whether it can be attained to the full extent of covering the outlay of construction and the fair remuneration of the patentee, is a subject on which, as an unscientific observer, I can offer no opinion. I can see no reason to presume that in this respect it will be found at all deficient; and in its application to steam-vessels, I think it probable that its advantages may be found of the utmost importance. I do not think that science is necessary towards enabling an ordinary observer to form a decided opinion on its merits in the prevention of a nuisance to the neighbourhoods of our numerous factory chimneys. Its success in the case of the chimney opposite your experimental furnace is evident and incontrovertible.* If it be not worth the while of the owner of a chimney to apply the inventions, I am sure it would be worth the while of his neighbours to subscribe for the purpose. I do not suppose that any one would be rash enough to take my evidence for proof on such a subject; but it is possible that parties interested in it may follow my example in judging for themselves by inspection. * * * I have some doubts whether economy of fuel will weigh as much as I think it ought with the inhabitants of Lancashire. We are, at present, rich and waste ul; but in London, Cornwall, and other districts, this feature of the invention, if duly established on experience, must be of great importance—in steam navigation, perhaps, of still greater. As a coal proprietor it is not my business to mention it at all; but I do not believe that what tends to benefit the manufacturer will in the long run diminish the consumption of coal.

Mr. H. Dircks, Manchester. F. EGERTON.

* At the establishment of Messrs. J. and J. Lockett, engravers, who have one furnace working on the Argand principle, and are now fitting up another.

ARTESIAN WELL AT SOUTHAMPTON.—We have the satisfaction to announce that this great undertaking is rapidly progressing towards a successful completion. The shaft is now sunk to the depth of 500 feet, being forty feet in the chalk, and within sixty feet of the extreme depth required by the contract to be attained, and by dint of great exertion on the part of the contractors, engineers, and workmen, the shaft has been sunk no less than twenty feet during the past week. As the work proceeds, the water, percolating through the flint strata, fast increases, and is found to be of the purest quality; both engines are kept constantly employed raising the water from the entire depth. The brick steining was discontinued at the depth of 465 feet, as the chalk was found to be sufficiently firm and solid to be capable of sustaining the superincumbent weight, and the brickwork therefore became unnecessary. Should no unforeseen difficulty arise to retard the progress of the work, there is no doubt that the well will be completed about Christmas, and a never-failing supply of the purest water will be thenceforward secured to the town.

The fossil plesiosaurus dolochodarus, recently found at Whitby Cliff, has, we understand, been sold to the committee of the Cambridge Museum for 230*l.* This is the most entire specimen of that wonderful animal ever discovered.

LAW INTELLIGENCE.

RAILWAY MORTGAGE DEEDS.

COURT OF QUEEN'S BENCH—NOV. 26.

DOE DEM.—WYATT *v.* THE ST. HELEN'S RAILWAY COMPANY.—This action upon a mortgage deed for the sum of 40,000*l.*, brought by the lessor of the plaintiff against the St. Helen's and Runcorn Gap Railway Company, tried before Mr. Justice Wightman, at the last Lancashire assizes, and on which a verdict was had for the plaintiff, with liberty to enter a nonsuit or to arrest judgment if the court should be of opinion that the action was not maintainable.—MR. BUSBY now appeared on behalf of the lessor of the plaintiff to show cause why the rule should not be set aside. The rule had been obtained on the ground that the mortgagee was not entitled to recover possession of the land of the railway company, and was not entitled under the mortgagee to maintain the action. The case was one of very great importance, for although the sum of money secured by the mortgage was only 70,000*l.*, the form of that mortgage was the one adopted by all the railway companies, and in deciding the present case their lordships would decide whether the mortgagees of all the railways in the country, comprehending a vast amount of property, could maintain actions for ejectment, or whether they were to recover the possession of the land of the railway in some other way. The Act under which the company was incorporated was entitled the 11th Geo. IV., c. 61, and by it they were empowered to raise a sum of 120,000*l.*, and to borrow a further sum of 30,000*l.* By another Act, the 4th William IV., c. 3, they were authorised to raise a further sum of 40,000*l.* upon loan, with power to mortgage the land of the company, for which purpose the two questions which would arise would be, first, whether under the terms of the Act of Parliament they were authorised to demise the lands they possessed, and if the court should be of opinion that they had the power to demise them, then the second question would be, whether, by the form of deed, they had so demised it. By the Act the company were empowered, for the purpose of raising the money on loan, to pledge the credit of the company, and to assign and charge all the property of the company, and the rates and tolls arising therefrom, or any part thereof, as a security for the money so advanced, and by another sect., the 59th, they were authorised to sell any land which was not required for the purposes of the railway. Now, he submitted, that on the construction of these two clauses the company were empowered by the legislature to demise any portion of the land or real estate of which they were possessed. The form of deed to be used in these cases was set out in the Act, and was as follows:—"We assign the said undertaking, and all the estate, right, title, and interest, in the same;" and it was clear that that included the legal estate of the company in the land. The learned counsel having referred to the authorities bearing on the subject, concluded by submitting that the rule for a nonsuit must be set aside, and a verdict entered for the plaintiff.

THE COURT, without hearing the other side, were unanimously of opinion that the words given in the form of the deed were not sufficient to warrant the construction given them by the learned counsel. They could not find that the Act of Parliament gave any power to the company to demise their land, and they must be guided by the words of the Act in determining the rights of parties. The parties, however, advancing money upon loan to these companies were bound to take care that they had good security for the money. Now the words of the Act were, "We demise the said undertaking;" but if it was intended to include land, that might have been very easily done. What was meant by the word "undertaking" he really could not understand. He could not find in them anything which did so improbable and so exceedingly inconvenient a thing to the public, and to the known interests confided to the proprietors of railways as to deprive them of the means of carrying on these undertakings by totally parting with their property in the land, by which they were enabled to carry them on for the convenience of the public. On these grounds they were of opinion that the rule for the nonsuit must be made absolute.

IMPROVED LOCK—INFRINGEMENT OF PATENT.

COURT OF EXCHEQUER—DEC. 2.

CARPENTER AND YOUNG *v.* SMITH.—This was an action for the infringement of a patent which the plaintiffs had obtained in the year 1830 for a door-lock. The peculiarity of the invention claimed by the plaintiffs was, the combination of a lever latch with the bolt in the same hasp. The question turned chiefly on the novelty of the invention claimed by the plaintiffs, and in reply to this claim it was alleged that eighty locks on the same principle, and on a large scale, were made for the Martello towers, so far back as the year 1809, that a street in Birmingham had locks of the same description affixed so far back as the year 1825, and that in Chubb's lock, for which a patent was obtained in 1828, the same principle was brought into operation with various improvements. A great number of scientific witnesses as well as practical mechanics were examined on both sides, and the jury eventually found a verdict for the defendant.

IMPERIAL BANK OF MANCHESTER.

COURT OF BANKRUPTCY—NOV. 30.

A party, whose name did not transpire, has been obliged to put in securities to answer a demand made against him as a director or shareholder in the Imperial Bank of Manchester, without any previous judgment. The bail was objected to, as, although, they had sworn in their affidavits that they were worth double the amount required after the payment of all their just and lawful debts, and were not sureties "in any other case," they might be for the party himself, and who was now held to bail to answer for the demand against him in this particular case.

The Learned Commissioner directed a search to be made, which being done and verified upon oath, it was found that the sureties were not bail in any other case, and their surety was held to be sufficient.

THE SPECULATION MANIA IN CORNISH MINES.

COURT OF BANKRUPTCY—DEC. 1.

T. S. CAVE'S BANKRUPTCY.—In this case, which has on several previous occasions been reported in our columns, the sitting held to-day was for the final examination of the bankrupt. On the part of one or two creditors it was stated that clue had been gained to some property which they had good reason to believe belonged to the bankrupt, or, more properly, to the estate, and it was, therefore, their wish that he should be questioned respecting it before his examination was passed.

Sir C. F. WILLIAMS said, if there was anything tangible in it, of course, he should be most ready to have an examination upon it. There must be, however, good grounds for it, as it would be unfair to prolong and adjourn the inquiries to which the bankrupt had already been subjected.—The applicant said this was a case in which a large amount of property had been involved, and the creditors were anxious to have the affair sifted to the bottom.—Sir C. WILLIAMS had the same desire. There was a point in the investigation which had gone before the public, and which, now he had looked over the papers of the estate, he thought should be noticed. The bankrupt had stated that he used no persuasions to get people to embark capital in his mining shares, which did not appear to be correct, for he (Sir C. Williams) found that the bankrupt had prepared an outline of instructions for his canvassers to use where they found a party likely and willing to lay out his capital at a profit. It ran thus—"If you would prefer an investment which, upon 10,000*l.* would pay you 1000*l.* a-year, instead of 300*l.* you get in the funds, I think I can transfer to you the offer made to me by a friend, which I regret I cannot avail myself of. You can have it secured to you for five years, and that premium granted to you as a *minimum* profit—viz., 10 per cent. My friend is, in the west, in copper, what Lords Durham and Londonderry are, in the north, in coals—an extensive miner; I would not mention his name, nor could I promise you such an advantageous investment, without first obtaining his permission to do so, and before I asked that I should like to know your own determination." This he (Sir C. Williams) thought was contrary to what had been before stated, that no persuasion had been used; probably this persuasion was not made use of by the bankrupt, but it was by his emissaries. Sir Charles then said, that in order to show the public the result of these grand mining speculations he should read the losses entailed as developed by the "mining" book; there was a loss of 15,656*l.* 11s. 3d. on Wheal Bolton; a loss of 15,637*l.* 18s. 10½d. on Rospeath; a loss of 29,658*l.* 11s. 11d. on Great Wheal Fortune, a mine that was to make the fortunes of all the shareholders; a loss of 9322*l.* 1s. 10d. on Penberthy Crofts; a loss of 16,485*l.* 3s. 1d. on Wheal Gwalton; a loss of 23,804*l.* 13s. 10½d. on Wheal Prosper, another of the mines that were to do these wonders; a loss of 21,344*l.* 3s. 4½d. on Wheal Friendship, another of these magnificent mines; a loss of 240*l.* 15s. 6d. on West Wheal Bolton; a loss of 1143*l.* 12s. 4d. on Wheal Neptune; a loss of 23,334*l.* 16s. 5d. on Owen Vean; a loss of 7121*l.* 3s. 4d. on Perran Downs; a loss of 392*l.* 17s. 3d. on Rosevidny; a loss of 76*l.* 7s. 9d. on Wheal Carpenter; 406*l.* 8s. 11d. on Boquin; 159*l.* 11s. 4d. on Treloweth; 202*l.* 16s. 4d. on Curlurim; a loss of 381*l.* 11s. 2d. on West Wheal Neptune; and a loss of 9155*l.* 14s. 11d. on Trevarton Downs, another of the mines that were to yield such immense profits—making a grand total of losses of 173,424*l.* 18s. 10½d.

The Official Assignee—But there were losses to the extent of 10,000*l.* on other mines besides, but previous to the year 1837.—Sir C. WILLIAMS: Let me have the note of it. (Produced). Now I see the other losses are, West Tolgin, 237*l.* 14s. 9d.; East Dolcoath, 544*l.* 13s. 1d.; Wheal Mary, 261*l.* 18s. 1d.; Cornwold, 476*l.* 6s. 1d.; Wheal Grey, 255*l.* 17s.; Wheal Trevean 1382*l.* 19s.; half Godolphin, 9928*l.* 9s. 1d.; half Tincroft, 3709*l.* 18s. 1d.; and one-third Polgine—making upwards of 19,000*l.* in addition to what was before enumerated. And this was the loss of the mines when the bankrupt addressed his letter to gentlemen, reckoning their estimate at—

A creditor—I think it was about 150,000*l.* a-year, and stating they were worth 3,500,000*l.*—Mr. Cave said he really did believe they were valuable, or he should not have engaged in them.

Sir C. WILLIAMS—Here is further evidence of how you endeavoured to dispose of the shares, which particularly relates to the Rospeath Mine. His Honour then read a letter which was addressed to a Mr. Bingham, dated from the War-office, Horse Guards, by the bankrupt; it stated the regret the bankrupt felt at the neglect of Mr. Bingham's not calling and looking at the mines when they were in the neighbourhood of Penzance, as Captain Richards and his family had, by his desire, prepared themselves to receive them. It then proceeded to remind Mr. Bingham, that if his sisters intended to take any of the shares in Rospeath they must lose no time, or else they would not get them at the low price of 100*l.* per share, for he was quite sure, such was the prospect of the mine, that they would shortly be worth 125*l.*, and would, no doubt, before a few months had passed, reach 150*l.* per share. The Wheal Bolton shares had all gone off his hands, and were worth much more than their issued price of 100*l.* per share; he felt confident before long those would be worth 200*l.* per share. Should the relatives of Bingham feel inclined to invest the money, say 3000*l.*, he would, should they not like them, rebuy them at the end of (we understood) six years, for 6000*l.*, allowing 5 per cent. interest for the money; or, if they chose to advance only 2300*l.* in shares, he would re-purchase them for 3000*l.*, with the same stipulation, so certain was he of the success of the mine. This was a specimen of the art the bankrupt employed to get off his shares, when, in fact, they were worth nothing.—Mr. Cave: But I really believed them valuable, and could bring evidence to show that my reports on the subject induced such belief. Besides, I did re-purchase those shares as I promised.

Sir C. WILLIAMS: Do you mean to say you repurchased those shares without any threat being held out?—Mr. Cave: The parties not liking their monies to be in the shares I refunded it as I stipulated.—Sir C. WILLIAMS: Then you repurchased them without any threat of exposure if the money was not paid.—Official Assignee said, the fact of repurchase of some such shares appeared in the books.

The party who had applied in the first instance to the court for a further examination, said the fact was that Mr. Bingham had, with his friends whom he advised on the subject, laid out nearly 10,000*l.* in these shares, and Mr. Bingham after a while thought it was not quite safe; he therefore hinted as much to his friends; it was not till the matter was pressed that the bankrupt was brought to a settlement. He would submit to the consideration of the court a case that had been prepared by counsel on the subject.—Sir C. WILLIAMS: I thought so; when there was a threatened exposure then the money came forth. I will just look at that case.—Mr. Cave was surprised to hear such a statement, as nothing was further from the truth. It was a most unfair charge, got up to prejudice him in the eyes of the court and the public.

The applicant said Mr. Bingham was present, and could be examined.—Mr. Cave: It is no such thing; Mr. Bingham cannot state that; it was I who got rid of him. When I discovered that he was speculating in shares for the purpose of "jobbing," I would not allow him to continue with me; it was I who made him withdraw. He was a bankrupt, and because I, in his case, did not concede to him, he is now taking this unfair advantage of my position. It is a vexatious opposition, and I am surprised at the party making it. I have not made a purse for myself, nor is there the least charge against me, further than erring in judgment, for which I have suffered by the sacrifice of my own family property.—Sir C. WILLIAMS: Yes, as well as other people's; for, although you have often stated that you employed no means to get rid of your shares, it even turns out that you sent a reverend doctor to Algiers to effect a sale of some to his friends there.—Mr. Cave said that was not correctly the case; that party had not the means to pay his passage there, so he (the bankrupt) advanced him 100*l.*—Sir C. WILLIAMS: Yes, when ruin was staring you in the face. Your dealings have been quite alien to that straightforward mode of doing business which should be practised by honourable men.—Mr. Cave: But, Sir Charles, it was his desire to go.

Sir C. WILLIAMS then stated another case, in which we understood a reverend gentleman wishing to engage in these mines to the extent of 5000*l.* with difficulty raised 3000*l.*, and mortgaged his wife's property to make up the rest, for the sake of realising the supposed extraordinary profit; it was lamentable to see such infatuation. He must, however, in candour to the bankrupt, state that the parties who had engaged in these undertakings had themselves to blame in a great measure for the loss; no one could have imagined, had not the case been presented to public notice, that credulity could so fatally have struck to the hearts of persons engaged in any branch of life. No less than twelve clergymen had been induced to advance a sum of 121,000*l.* in this magnificent nothing. He regretted that those gentlemen had not exercised common sense; if they had, the 121,000*l.* would, in all probability, have now been in their pockets.

In the course of a further examination with respect to an alleged removal of furniture, Mr. Cave denied all fraudulent motives, and said—If I have been a sanguine man, that is my only error; I never speculated for the benefit of myself [not generally the case with speculators, we believe]. I thought of myself the last, instead of the first.—Sir C. WILLIAMS said the bankrupt must dispense with all harsh expressions; here was he, standing before the public having expended the sum of from 300,000*l.* to 400,000*l.* in mining transactions, and the creditors had a right to put questions.—Mr. Cave did not complain of the questions being put, but it was the insinuations they carried with them.

It was ultimately arranged that an adjournment should take place for ten days, as it was expected some accounts of a useful nature would be received from Captain Richards, who has a mortgage of from 10,000*l.* to 20,000*l.* upon the mines.

Mr. Bingham was then heard at great length as to the way in which he became a shareholder, and stated he was told by the bankrupt that the shares would yield a profit of at least 50 per cent. It appeared that, having some fears respecting the ultimate success of the mines, he saw Cave, with the view of getting his money back, and, after a great deal of trouble, he said he became bankrupt, in order to bring the matter to a settlement.—In the course of the recital a great deal of extraneous matter was introduced, but the result of it went to show that when he became a bankrupt a settlement was effected.—Mr. Cave, in answer, stated that he found Mr. Bingham had been employing monies which in truth were not rightly his own so to deal with, and he therefore refused to pay them over but to the parties themselves. He called his honour's attention to the case where, in his presence, he arranged the payment of 700*l.* to a lady from Shropshire; that was the case before the court, and Mr. Bingham was the bankrupt in it.—Sir C. WILLIAMS recollected the circumstance extremely well.—It was then agreed that Mr. Bingham, if he thought it necessary, could further go into his case at the next private sitting to inquire into the property question raised that day.

Sir C. WILLIAMS said, that if that examination fell to the ground he should think it his duty, unless new points were raised, to pass the bankrupt's last examination. When he did that he should have some observations to make on the general features of this most extraordinary case.

THE MARYLEBONE BANK—ANOTHER "VICTIM."

IN RE HANNAY.—This day was fixed for the choice of assignees in the matter of this bankrupt, who was *managing* director of the Marylebone Bank, and now confined in the Fleet Prison. His debts to the bank were stated to be about 14,000*l.*; a few debts were proved to-day, without any opposition, and Mr. Robert Lowe, of Maddox-street, Bond-street, was appointed assignee.—The particulars of the "unfortunate" dealings of this person has frequently appeared in our columns, in noticing the proceedings of the Borough of Marylebone Joint-Stock Bank.

THE STANNARIES OF CORNWALL.

The county of Cornwall is under peculiar jurisdiction—namely, that of the "Duke of Cornwall." The duchy of Cornwall was created in 1337, in favour of Edward the Black Prince, and settled by Act of Parliament on the eldest son of the Sovereign of England. The Duke thence enjoyed large revenues, arising from the lordship of castles, boroughs, and manors, granted to him in Cornwall and Devonshire, the profits arising from the "coinage" of tin, and various other sources. The annual revenue from the average of the three years subsequent to the death of the Black Prince was 2493*l.* 7s. 3¾d.; the clear revenue in the 15th year of Henry VIII. amounted to 10,095*l.* 11s. 9½d.; in the 44th year of Queen Elizabeth, in 1602, it had fallen to 4569*l.* 12s. 2½d.; and at the publication of Messrs. Lysons' *Magna Britannia*, in 1814, the gross amount was estimated at 22,000*l.*, of which 8500*l.* arose from the tin duty in the county of Cornwall, and 3500*l.* from the rents of manors, fines, &c., in the same county. The sources whence the remainder was derived are not there enumerated. Before the war of 1793 the tin duty had amounted to 14,000*l.* per annum. The immediate government of the county was vested in the Duke, who still had his Chancellor, Attorney-General, and Solicitor-General, and his Court of Exchequer—he also appointed his sheriffs. The mining trade is under the separate jurisdiction of the Stannary Courts; the Lord Warden of the Stannaries and the Vice-Warden are at the head of this jurisdiction, with a final appeal to the Duke and his council. The miners claim to be free from all jurisdiction, except that of the Stannary Courts, except in cases affecting, land, life, or limb. The Vice-Warden's Court is held once a-month, and is a court of equity for all matters relating to the tin mines and trade. No writ of error lies to the courts at Westminster, but there is an appeal to the Warden, and from him to the Duke in Council, or, when the Duchy is vacant, to the Sovereign in Council. Issues are frequently directed by the Vice-Warden to be tried in the Stannary Courts, which are held at the end of every three weeks before the steward of each of the four stannaries, or mining districts—namely, Foymore, Blackmore, Tywarnhale, and Penwith and Kerrier. In those courts all civil actions, in which either plaintiff or defendant is a privileged tinner, are tried before the steward and a jury. From those courts an appeal lies to the Vice-Warden, and from him as in other cases. The Stannary laws are revised, or new ones enacted, by the Duke and his Council, with the consent of what is called the "Stannary Parliament," consisting of twenty-four stannators, gentlemen of property in the mining districts—six being chosen for each stannary. Those for Foymore are chosen by the Mayor and Corporation of Lostwithiel; those for Tywarnhale by the Mayor and Corporation of Truro; and those for Penwith and Kerrier by the Mayor and Corporation of Helstone. The last Stannary Parliament was held in 1752, at Truro, and continued, by adjournments, to September, 1753. The Stannary Laws have been repeatedly published. The "Stannary Prison" was at Lostwithiel, but, by the Act of William IV., is now at Bodmin. The ancient records of the Stannaries were kept at Lostwithiel till they were burnt in 1644 by the Parliamentary army in the civil war of Charles I.'s reign.

An Act was passed in the 6th and 7th William IV., cap. 106, entitled "An Act for the better and more expeditious Administration of Justice in the Stannaries of Cornwall, and for enlarging the jurisdiction and improving the Practice and Proceedings in the Courts of the Stannaries." By the fourth section of that Act the equitable jurisdiction of the Vice-Warden is extended to all matters connected with the working of lead, copper, or other metal, or metallic minerals, within the county of Cornwall. By the sixth section the Stannary Courts were consolidated, and were to be held before the Vice-Warden, who was to have the same authority that the stewards had. The Vice-Warden, by sec. 14, is authorised to make rules and orders for the regulation of the practice and proceedings of his court. Such rules as relate to the equity side of his jurisdiction are to be confirmed by the Lord Chancellor; and such as relate to the common law side by one of the judges of the superior courts of common law at Westminster. The Vice-Warden's Court is constituted, by sec. 21, a court of record, and is held at Truro.

FRENCH COMMERCE.—From an analytical summary of the external commerce of France, we learn that no sensible variation has taken place in the importations of bar-iron and rough cast-iron, but there appears in the amounts relating to the latter article a tendency to decrease. The importations of coal have progressively increased since 1835; the year 1840 presents the largest amount of the whole period (18,000,000), that of 1835 was only 12,000,000.

LONDON GEOLOGICAL SOCIETY.

1. "A supplement to a paper, entitled 'A Synopsis of the English Series of Stratified Rocks inferior to the Old Red Sandstone,' with additional remarks on the relations of the Carboniferous Series and Old Red Sandstone of the British Isles." By Professor Sedgwick.

The author commences his paper by stating that his former synopsis is now modified; 1. By the new classification of the stratified rocks of Devon and Cornwall; 2. By a larger knowledge of fossils, derived from some of the groups described; and, 3. By new observations made during the past summer in the south of Ireland, the south-west of Scotland, and the north of England.

New Red Sandstone.—The upper part of this series of strata is shown by sections derived from Warwickshire, to be sometimes unconformable to the lower portion which represents the magnesian limestone and inferior beds; and the latter division is also shown to pass into the coal measures, the intermediate strata being loaded with common carboniferous plants. In the neighbourhood of Whitehaven, however, there is no passage from the lower new red sandstone into the coal measures, though the carboniferous flora apparently existed in full perfection during the period in which the former strata were deposited. The new red sandstone of Dumfriesshire is shown to be continuous with that of the plains of Carlisle, but the lower divisions of the series are considered to be wanting. The strata near Dumfries are stated to be mineralogically the same as those of Corncokle Moor, and to contain impressions of footsteps. To the north of the Galloway chain the new red series occurs at very few localities; and, coupling this fact with the great development in many parts of Scotland of red sandstones of the carboniferous series, the author concludes that the highest stratified beds of Arran do not represent the new red sandstone, but to a portion of the coal measures, though there is no counterpart in England of the upper conglomerate of that island.

Carboniferous Series.—The change in this series, in its range from the north of England to the basin of the Tweed, are briefly noticed, and the coal-field of the latter district is shown to be geologically far below the great coal-field of Newcastle, assuming the Scotch type, though the coal-field on the south side of the Firth conforms to the English type. The carboniferous series of Scotland is then stated to be divisible into the three following groups:—1. The rich deposits, with numerous beds of coal, presenting in their general characters the closest analogy to the English coal-fields, though their exact position in the geological sequence cannot be determined. 2. A great group, forming the base of the most productive coal measures, and containing beds of coal of an inferior quality, also many thin bands of limestone, alternating with sandstones and shales, and having generally thick beds of limestone at the top. 3. A varinble deposit of red sandstones, shales, &c., containing, in the higher portions, coal measure plants, with even thin beds of coal, and passing downwards by insensible gradations into the old red sandstone. The author next points out the perplexity which has been introduced into the geological map of Scotland, by representing the carboniferous series and the old red sandstone of one colour; and by confounding, along a considerable part of the country, bordering on the north shore of the Solway Firth, the new with the old red sandstone.

Old Red Sandstone.—The extraordinary irregularity of this formation in the British Isles is first noticed, the old red conglomerates of Cumberland are then compared with those on both sides of the Galloway chain, and the sections in the south of Ireland, connecting the old red sandstone with the carboniferous series, and constituting a good passage, are next described. The lower carboniferous shales there pass into roofing slates, resembling the black slates at the base of the Devonshire culm measure and the great coal-field in the west of Ireland, overlying the mountain limestone, assumes the characters of the same culm measures. These facts, the author says, remove the difficulty in classificalion presented by the mineral structure of the Devonshire culm series. From the details connected with the above statements, Mr. Sedgwick draws the inference, that no new formation can be interpolated between the old red sandstone and the carboniferous series, the sequence of strata being complete; and as the sections in the Silurian country described by Mr. Murchison, show that no member is wanting between the old red sandstone and the Ludlow rocks; there is, consequently, one continuous, unbroken succession from the lower division of the new red sandstone down to the Llandeilo flagstone; and, therefore, that the argument for the true place of the Devonian system is complete, for any formation with fossils intermediate between the carboniferous and Silurian systems must have an intermediate position—must, therefore, be on the parallel of some part of the old red sandstone, which fills that whole intermediate position.

Sections of North Wales.—The author, after referring to his former description of the great masses of North Wales, states that his Snowdonian fossils have been found to be identical with Silurian species, and that the same result has been obtained from an examination of the organic remains of the Berwyns—hence he concludes, that, in the great section of North Wales, there is no positive geological distinction in the successive descending groups, the only difference being the gradual disappearance of species which occur in the higher beds.

Cumbrian Groups.—The groups exhibited in a section from Keswick through Kendal to Kirby Lonsdale are—1st, that of Skiddaw Forest; 2d, a group essentially composed of quartzose and chloritic roofing slates, associated with innumerable igneous rocks, and bounded by calcareous slates, which extend from the south of Cumberland to the neighbourhood of Shap Wells; 3d, a great series of beds, ranging from the calcareous slates to the carboniferous series, and separated provisionally, by the author, into two divisions—the lower consisting of slates and flagstones, with occasionally thick, hard, arenaceous strata, the fossils containing many species characteristic of the lower Silurian rocks, and the upper being composed of arenaceous flagstones, with beds of hard greywacke, calcareous matter occasionally occurring, but no beds of limestone fit for use. The fossils of this division, a list of which, by Mr. J. Sowerby, accompanies the paper, contains numerous species belonging to the upper Silurian rocks of Mr. Murchison, or to the beds which have been considered to form the base of the old red sandstone in Shropshire. From the above specific determinations of organic remains, the author says, the following definite information is obtained—viz., that the lower division is lower Silurian, and that the upper ends at the very top of the Silurian system. Two other sections are then briefly noticed. One from the Shap granite through the fossiliferous state to Howgell Fell, the beds of which are placed in the upper division of the upper Silurian system, but not the highest part; and the other from the western boundary of the calcareous slates to Ulverston, including, 1, the calcaerous slates (Caradoc) of Millom, in Cumberland; 2, quartzose flagstones; 3, the roofing slates of Kirby Julith; 4, a second band of calcareous slates with lower Silurian fossils; and 5, an upper series of flags and slates which reach to the neighbourhood of Ulverston. The last beds are overlaid by strata of a coarse composition, but which, in a section continued to Morecambe Bay, do not show any upper fossiliferous bands.

Ireland and South of Scotland.—Some sections in the counties of Waterford and Kerry, to which the author was conducted by Mr. Griffith, are then briefly noticed. They exhibit a fine sequence of lower Silurian rocks, but the connection with the older non-fossiliferous slates is not visible. He afterwards shows that Mr. Griffith's present grouping of the older strata in the south of Ireland is not only sanctioned by the section, but removes the supposed anomaly of carboniferous fossils reappearing at different levels in a descending series. The Silurian fossils of the north of Ireland, preparing for publication by Capt. Portlock, are also noticed; but it is stated that the sections of that part of the kingdom do not appear to connect these fossiliferous rocks in such a manner with the older formations as to materially assist in their subdivisions or groupings.

Mourne Mountains—Galloway Chain, &c.—After a few details on the physical features and mineral composition of Downshire, Mr. Sedgwick describes the chain, extending from the Mull of Galloway to St. Abb's Head. The prevailing strike of this range, like that of the Mourne Mountains, is about north-east by east, even in the neighbourhood of protruded masses of granite. The strata consist generally of a hard, fine, or coarse greywacke passing occasionally into roofing slates, and destitute of fossils, except in the finer schists, in which the *Graptolites foliaceus* has been found. The strata which break out from under the carboniferous basin of Girvan water, in Ayrshire, are next described, and shown to contain many Silurian fossils. Lastly, a synoptical table is given of the great groups ranging from the carboniferous series to the lowest beds of the north of England, the classification being as follows:—1. The carboniferous series. 2. The old red sandstone (Devonian system). 3. Silurian system. 4. The sub Silurian, or Upper Cambrian. 5. The lower Cambrian, including the great groups of North Wales below the Bala limestone and the older roofing slates of Cumberland. 6. The lowe Cumbriran or Skiddaw slates, and containing provisionally the chloritic slates of Anglesea and Caernarvonshire.

2. A Letter from Mr. Lyell to Dr. Fitton, "On some of the Phenomena connected with the Coal Measures and older Strata of Pennsylvania."

Mr. Lyell's attention, from the period of his arrival in America to the date of this communication (15th October), had been principally devoted to the great succession of Silurian, Devonian, and Carboniferous rocks of Pennsylvania and New York, but he confines his present remarks more particularly to the phenomena presented by the coal measures, and the extension to America of Mr. Logan's generalisations respecting the beds of fire-clay containing stigmaria, which occur beneath each stratum of coal in the Glamorganshire coal-field. Mr. Lyell first visited the collieries of Blossberg, on the extreme northern frontier of Pennsylvania, and in the examination of which he was assisted by Dr. Saynisch, President of the Mines. The strata, both in detail and as a whole, bear an exact analogy to the British coal measures, and he found beneath every seam, except one, a bed of fire-clay, varying from one to six feet in thickness, and containing abundance of stigmaria, with their leaves attached to the stems. All the specimens seen *in situ*, with one exception, were parallel to the planes of stratification, but the leaves penetrated the clay in all directions. The roof of the coal seams is usually composed of bituminous shales, but sometimes of very micaceous grits, which afford a great variety of ferns and other plants, all of them agreeing, generally, at least, with those common in British coal measures. Mr. Lyell afterwards examined the anthracite deposits at Pottsville, in the southern part of the Alleghanies, under the guidance of Professor H. D. Rogers; also the coal-field of Tamaque, the Lehigh summit mine, the Room Run Mines, on the Nesquahoning, and the Beacon Meadow, or middle coal-field—in all of which districts he found beneath each coal seam a bed of fire-clay containing stigmaria, and in the overlying sandstone, or roof, various specimens of ferns. Mr. Logan has likewise lately made a series of independent observations on the carboniferous deposits of North America, and Mr. Lyell announced that that gentleman has found beds of fire-clay with stigmaria under the coal seams of Nova Scotia. The Pottsville district and the Lehigh summit mines were illustrated by sections given to Mr. Lyell by Professor H. D. Rogers, who has been engaged during five years in the Government geological survey of Pennsylvania. The former section extended from the north of Pottsville to the country ranging immediately south of Orwigsburg. At the point where Mr. Lyell's examination commenced, the coal measures are vertical; but, in an excavation from which the anthracite had been removed, the bed occupying the position of the underlay presented impressions of stems and leaves of stigmaria, unaccompanied, as usual, by any other plants, and the stratum which represented the roof of coal contained leaves of pecopteris, reed-like impressions and calamites. To the south of these vertical measures is a deposit, inclined at an equally high angle, of quartzose conglomerate, beds of which alternate with seams of anthracite at the junction of the two deposits. Proceeding further southward, there are displayed successively—1. A vast series of red shale, grey sandstone, and red sandstone, which Mr. Lyell considers as portions of the old red sandstone; and, 2. Olive coloured shales, with Devonian fossils—the strata of the whole of which are nearly vertical. Yet further south, and at a short distance from Orwigsburg, the olive shales are succeeded by highly inclined strata, assigned by Mr. Lyell to the upper Silurian rocks, and through which protrudes an axis of beds, considered by him to be composed of lower Silurian strata. Lastly, on the southern confines of the section is a trough of Devonian or olive coloured shales. The above geological classification differs from that of previous observers, but Mr. Lyell has been induced to propose it in consequence of an examination of a portion of the state of New York subsequently to his visit to Pottsville. At the "Lehigh Summit Mines" a bed of anthracite, more than forty feet thick, is quarried in open day, forty feet of sandstone being entirely removed to work the coal. With respect to the long observed fact, that the anthracite coal is confined to the Atlantic side of the Alleghanies, and the bituminous to the more inland and less disturbed region; and with respect to the supposition that the former belonged to the transition, and the latter to the secondary period, Mr. Lyell states, that both varieties clearly overlie the old red sandstone, and contain the same vegetable remains; and he is of opinion, that the change from the bituminous to the anthracitic condition was a concomitant of the upheaval and folding of the rocks, the conversion being most complete where the beds have been most disturbed. Mr. Lyell has also examined the cretaceous strata of New Jersey, accompanied by Mr. Conrad, and he states that the fossils which he collected from its different members, bear a striking analogy with those of the equivalent series of Europe, especially of the craie tufeau of Normandy. He has likewise examined, in company with Professor Silliman, the new red and intrusive trap in Connecticut; and, lastly, he has visited the falls of Niagara, and is of opinion that he can prove their recession by new arguments, drawn from the position of a fluviatile deposit which he has traced below the cataract.

MR. VIGNOLES'S LECTURE ON CIVIL ENGINEERING.

On Wednesday, the 1st inst., Mr. Vignoles delivered his second lecture on "Civil Engineering." In the first lecture (reported in our last) he gave the general principles of the various descriptions of foundations; in the present he proceeded to illustrate those principles by diagrams. He stated, that if a good foundation was provided by Nature, the subsequent operations were simple, the main point being to imitate Nature as closely as possible. Where the soil was bad, considerable skill was required; for instance, in laying the foundation for the pier of a bridge, a wall, or a column, the first point was to give the base extensibility, in proportion as the natural soil was weak, so in equal proportion must the size of the base be increased—the pressure must also be equal; the soundness of the foundation not depending so much upon the amount of settlement as upon its equality. There were various ways of obtaining this—viz., by the use of concrete alone, or in conjunction with timber, timber alone, or stone, or brick. Having so much insisted upon the necessity of an uniformity, it must be supposed that no portion of the artificial soil should escape; where that was likely, sheet piling must be resorted to. He then, by means of diagrams, explained the nature of that method—it being by driving piles close together, all round the foundation; the piles being (say) four inches wide, and as long as might be necessary. This method entirely prevented the escape of the soil in any manner but in a vertical direction, and ensured an uniform sinking, however bad the natural soil might have been. He then alluded to a very large chimney, twenty-two feet square, where the natural soil was a shifting quicksand; concrete was put in in layers, until the bed was eight feet thick; on this was placed a layer of flagstones, five feet square; eight days after the work was completed, the whole sunk eighteen inches, without the least deviation from the perpendicular. Other modes had been adopted, amongst which was the following:—A number of timber were laid across, and concrete placed in the spaces between; it was then filled up with bricks; timbers were laid in a cross direction, and the flat stones placed upon them. In this instance the wood was laid where no change of atmosphere could affect it. The nature and use of a coffer-dam was then explained, and the Professor, at some length, showed the danger of incautiously drawing the piles; the vacuity occasioned by their withdrawal being filled up by the surrounding matter, greatly injured the stability of the foundation. In making one of the London bridges a great disfigurement had occurred in consequence of the incautious withdrawal of the piles, one side of the pier having sunk one foot. The modern plan to prevent such accidents was to have a double coffer-dam—the piles of the inner one being cut off, and the outer piles might be withdrawn without danger. In laying foundations, he supposed there was a layer of soft ground, of moderate depth, with a hard substrata; piles must be driven through the soft soil into the hard bed; a very slight depth would be sufficient, but still, in most cases, sheet piling would be necessary. He was lately indebted to an officer of the Bengal Engineers for an account of a very ingenious method, almost universally practised in laying the foundations of bridges and temples in India. It would not answer here, labour being so dear; but there, where wood was very scarce, building materials in great plenty, and labour very cheap, it was the simplest and most effective that could be imagined. From the explanation, it appeared that the system was the same as piling, but, instead of using wood, small wells of brickwork were substituted. Take, for instance, the pier of a bridge; a small well of brickwork was constructed—say, six feet deep, seven feet in diameter, with a hole through it, three and a half feet in diameter; this is placed on the sandy bed where the foundation is to be made; a workman gets into it, and undermines the well from the inside, the earth being drawn up in buckets, additional layers are added to the well until a sound bottom was reached; and the singularity was, that there was not one or two of these little wells, but hundreds, and, in certain cases, to a depth of fifty-five feet; arches were then thrown across, and the superstructure raised. When the foundation was in the bed of a river, the excavation went on by the workmen diving through the water to the bottom of the well, and working there until obliged to come to the surface for air; for instance, through ten feet of water in the river and to the extent of forty feet of water in the well—one of the most extraordinary instances of perseverance upon record. English engineers had somewhat abridged the labour by substituting an oblong square of fifteen feet by four feet, with two elliptical holes for the workmen, so that, instead of three wells of six feet, they get one of fifteen feet—the principle being precisely the same. In France a number of bridges had been built where the water was not rapid, upon a very simple foundation; a framework of timber being made, furnished with short piles at the corner, and laid in the bed of the river, and the superstructure raised upon it by means of a wooden diving-bell. The *pier perdue* was another way, but could only be used in still water; a quantity of stones were thrown in until a foundation was obtained; where there was any current this foundation was sure to give way, as in Plymouth Breakwater and Kingston Harbour. He then alluded to the case of one of the London docks, where the wall, being made with too great a curve, from the want of pile sheeting, the soil gave way—the engineer adding fresh matter until the toe of the wall actually appeared (to the astonishment of all) above the surface on the other side. He then gave examples of several original methods of preparing for the formation of foundations in Italy and Ireland by means of baskets of stones, &c., after which he explained the nature of concrete, and gave directions for its formation—viz., one part of lime, twice that quantity of sand, and twice as much broken stone, or gravel, as there was sand. The goodness of the concrete depended upon the quality of the lime. In making concrete, it must be borne in mind that the materials were far more bulky separate than when mixed; for instance, to make a cubic yard of concrete, which contained twenty-seven cubic feet, it would be necessary to have thirty-four cubic feet of materials, besides the water. The three ingredients should be mixed dry, and the water added; in slaking the concrete will expand about one-thirtieth in bulk. The great expense of coffer-dams, and of piers generally, had lately led to a very peculiar construction of bridges by piling only, as, for instance, in iron bridges, no masonry being used. The learned Professor stated that he had built seven or eight bridges upon that system; the piles were driven in and the iron work erected upon the wood. It had been tried to substitute cast-iron for piles instead of wood, but they had not succeeded, the iron being very liable to break. He also alluded to a beautiful arrangement for fixing branches to piles by means of a sliding collar, but which it is impossible to explain without diagrams. A French work, above 200 years old, was produced, with some very curious engravings of the modes then in use for securing foundations, and which proved that we are using the same means at present, and that many of our so-called new processes were in use at that time. He then concluded by stating, that, at his next lecture, he should bring forward some more general rules respecting foundations, and after that proceed to consider the best method of securing slopes of earth, now so generally in use.

RUINS OF PERU—AURIFEROUS RIVER CHUCABAMBA.

The following interesting communication was read before the Academy of Natural Sciences, Philadelphia, on the 14th ult., by J. B. Quinby, corresponding member:—"It was reported in Chili that the jewels of the Temple of the Sun, which, at the time of the conquest of Peru, the natives had concealed from the Spaniards, have lately been recovered near the Cerrio de Pasco, in Peru. The value of them has been calculated at 180,000,000 dollars." The palace of the Inca and the Temple of the Sun, here referred to, we presume to be Huanuco Viejo, which is situated on the east side of the Andes, twenty leagues north of the Cerrio de Pasco, and on the right bank of the River Chucabamba, one of the head branches of the Amazons (Maranon), at an elevation of about 14,000 feet above the level of the ocean, in latitude 108 south, and longitude 74 deg. west, nearly. It is known that when Pizarro, now more than three centuries ago, took the Temple of the Sun at Cuzco, which is some twelve degrees south of that at Huanuco Viejo, and despoiled the Inca of his immense treasures of gold; and, finally, when threats could extort no more, put him treacherously to death; the Inca of Huanuco Viejo, advised of what had taken place at Cuzco, secreted the jewels of the temple and the gold of his palace in the fastnesses of the Andes and the neighbouring rivers and lakes. Avarice and ambition have made these hidden treasures objects of continued search, from the days of Pizarro to the present time; but as yet no clue has been found to this *El Dorado*, unless the above announcement is well founded, which we are inclined to doubt. The writer has been five different times at these magnificent ruins, and always found persons employed in their vicinity searching for the hidden treasure of the Incas. The whole of the River Chucabamba, for a number of leagues above and below the Temple of the Sun, is auriferous, and the inhabitants of the province of Huamelies, through which it passes, obtain by washing the sand and by means of sheep skins 200,000 or 300,000 dollars annually. The wool on the skin is cut until it is about half an inch in length; the skins are then anchored down, with the wool side up, by means of loose stones placed on them, in and below the various falls and rapids, in which position they are suffered to remain from six to twenty-four hours; they are then carefully raised out of the water, turned wool side downwards into a baten (tub) of water, and thoroughly washed—the gold falling from the wool of the skin, and it is finely collected from the bottom of the baten. Sheep were unknown to the Incas, and as they had obtained an immense amount of gold from this Pactolean stream, it is presumed that they used the skins of the lama (*Camelus lacina* of Linnæus), and those of the vicuna (*Camelus peruanus*, or *vicugna*, of Linnæus).

When we reflect on the fact that the Indians and Spaniards have obtained, by their rude washings on this river, during two or three centuries, 100,000 dollars, 200,000 dollars, and 300,000 dollars of gold annually, and that they have not probably secured the one-hundredth part of the amount that has passed down the current of the stream, we may form an imperfect idea of the exhaustless source of this perennial supply. The stupendous Andes are alone capable of furnishing such countless riches.

We shall not attempt a description of the magnificent Temple of the Sun at Huanuco Viejo, its powerful fortress, and the ruins of the great city which they overlook; when and by whom they were built, neither history nor tradition inform us. The Incas had no written language, and we are left conjecture; but their great magnitude and massive walls, composed of huge blocks of square, oblong, and elegantly wrought marble, greenstone, and greenstone porphyry, weighing many tons, bear mute but eloquent testimony to the untiring industry of the Incas, and their advances in the arts of civilisation. The ravages and earthquakes of centuries have left these monuments almost as perfect as they were when Pizarro conquered Peru; even the great earthquake which destroyed the city of Callao, built by the Spaniards, with its 30,000 inhabitants, did not throw down the massive walls of the Temple of the Sun; and the writer can testify that they withstood, with slight injury, the great earthquake of March 30, 1828. The seraglio and its various compartments, with the exception of the roof, and the voluptuous baths for a numerous train of wives, cut out of the massive rocks, are almost as entire as they were on the landing of Pizarro.

If there is any location on the whole range of the Andes more sublime than all others, it is at the base of the Peak of Raura, in sight of this temple. The writer has crossed the Andes from side to side twenty-four times, at seven or eight different passes, twice from Naranjal, on the Gulf of Guayaquil, one and a half degrees south of the equator, to the city of Cuenca, the capital of the province of Azuay, a little south of Chimborazo, and having spent more than two weeks at the foot of the Peak of the Raura, at least 1000 feet above the line of perpetual snow, he has no hesitation in saying, that it is incomparably the most sublime spot he ever visited on the Andean range. Besides the Peak of Raura, which we believe to be at least as high as Chimborazo, there are numerous smaller ones rising on the range of the Cordilleras, to the north and south, having their bases resting in the perpetual snow, and throwing up their snow-clad apexes thousands of feet into the pure and attenuated air—almost out of the reach of the eye, and above the untiring wing of the immense condor, or South American eagle. The largest and nearest of these peaks is that of Nueva Potosi, the base of which approaches within a league of that of Raura, and is but little inferior in height and magnitude to Raura itself. The intervening space between these two peaks is occupied by the lake of Nueva Potosi, the surface of which is almost 500 feet above the lower limit of perpetual snow, and this line, within the tropics, is known to be about 15,500 feet above the level of the ocean. The surface of this lake is embossed by a ridge of the Andes on the west, another on the east, the base of Raura on the north, and that of Nueva Potosi on the south. Its copious waters find a subterranean channel through a high western limestone ridge, and break out at the western side of the Andes, at a point where the mountain is very nearly vertical, and form a magnificent cascade of many hundred feet in height, falling into a lake of several leagues in circumference. A short distance to the north-west of this cascade there is a large *cerro* (hill) of *yeso* (gypsum, or sulphate of lime). The lake of Nueva Potosi is the head source of the River Huara, which makes its way down the sides of the Andes in very nearly a westerly direction, and falls into the Pacific Ocean at Huacho, the famous Salinas of the western coast, which supplies the greater portion of the southern hemisphere with salt. On the north-east of the base of the peak of Raura is the lake of the same name, one league north of the lake just described, and from which it is separated by a high trap dike and amygdaloid. This lake, which is about 150 miles from the Pacific, is a little higher than that of Nueva Potosi, and has an open outlet to the east, down a craggy precipice of several hundred feet in height. It forms the head of the River Chucabamba, one of the principal branches of the Amazons, and probably it is the highest and most distant source of that great river. The waters of this lake traverse the continent of South America, from west to east, at its widest expanse, almost from the margin of the Pacific to the Atlantic, a distance of nearly 5000 miles; both of these lakes are the receptacles of avalanches from the peaks of the respective names. No less than two were precipitated into the lake of Raura whilst I was encamped on the snow in its vicinity; the first occurred at midnight, and which, from the great noise and trembling of the earth, I for a moment mistook for an earthquake—the second took place at ten o'clock in the morning.

MINES OF CALABRIA AND THE NORTH OF SICILY.—M. Paillette read a memoir, at the Paris Academy of Sciences, "On the Metalliferous Deposits in Calabria and the North of Sicily," in which he contested the usually received opinion as to the antiquity of the mines found in these countries, and considered that they were not older than the beginning of the last century; he also showed that the metals in the districts in question do not form veins, properly so called, but merely fill up the interstices between strata or the fissures of rocks.

NEW METHOD OF CONSTRUCTING BRIDGES.—At the meeting of the Paris Academy of Sciences, on the 22d ult., M. Poncelet read the report of a committee "On a Method of Construction of Bridges," proposed by M. Giraud. The base of his system is this—that it is possible to form a collection of "voussoirs," or wedges in wood, iron, stone, or other materials, in which the weight and thrust shall be so combined that the whole may have the effect of a single block or beam; and that thus a bridge may be constructed perfectly flat, both above and below, without any curve at all. The form of the "voussoirs," as proposed by M. Giraud, is that of a half ellipsoid, or half egg, with the flat part uppermost, and the different "voussoirs" are fastened together by strong iron ties, the proper proportioning and adjusting of which seems to be the most difficult part of the system. The reporter stated that, without expecting M. Giraud's system could be used generally as a substitute for the other systems now adopted, yet it could be applied advantageously on a small scale. It was not cheaper than other plans, but it had the advantage of allowing bridges to be built at a greater altitude above the surface of the water, and thus of offering fewer impediments to navigation.

WANTED.—The late cashier of the Blaenavon Iron and Coal Company being disengaged from his appointment, in consequence of a change in the management, is desirous of obtaining another, either as CASHIER, SECRETARY, or AGENT. He has had great experience in the iron trade, as well as in mercantile affairs generally, and can produce first-rate testimonials of integrity and ability, and security if required.—A line addressed "S. R. B.," Post-office, Abergavenny, will be immediately attended to.

MEETINGS OF SCIENTIFIC BODIES.

IN THE ENSUING WEEK.

SOCIETY.	PLACE OF MEETING.	DAY.	HOUR.
Royal Asiatic	14, Grafton-street	Saturday	2 P.M.
Entomological	17, Old Bond-street	Monday	8 P.M.
British Architects	16, Grosvenor-street	Monday	8 P.M.
Medical	Bolt-court, Fleet-street	Monday	8 P.M.
Linnæan	Soho-square	Tuesday	8 P.M.
Horticultural	21, Regent-street	Tuesday	2 P.M.
Chemical	47, Leicester-square	Tuesday	8 P.M.
Medico-Botanical	32, Sackville-street	Wednesday	8 P.M.
Graphic	Thatched-house Tavern	Wednesday	8 P.M.
Royal	Somerset House	Tuursday	8½ P.M.
Rl. Society of Literature	St. Martin's-place	Thursday	4 P.M.
Antiquaries	Somerset House	Thursday	8 P.M.
Royal Astronomical	Somerset House	Friday	8 P.M.
Royal Botanical	Regent's-park	Saturday	4 P.M.
Westminster Medical	Exeter Hall	Saturday	8 P.M.
Mathematical	Crispin-street, Spitalfields	Saturday	8 P.M.

PUBLIC COMPANIES.

MEETINGS.

Bank of British North America	Office	Dec.	7 ... 1.
Grand Junction Water-Works	Office, Brook-street		9 ... 12.
Polbreen Tin and Copper Company	44, Finsbury-square		14 ... 2.
Eastern Coast of Central America Co.	Jamaica Coffee house		20 ... 1.
Tincroft Mining Company	44, Finsbury-square		23 ... 2.

CALLS.

Bristol and Gloucester Railway	5*l*.	Dec. 11	Barnett, Hoare, and Co.
Cambrian Iron and Spelter Co.	2*l*.	29	London Joint-Stock Bank.
West Wh. Jewel Mining Ass'n.	10s.	31	London & Westminster Bank.
Northern and Eastern Railway.	5*l*.	Jan. 1	Masterman and Co.

DIVIDENDS.

Combmartin & N. Devon Mine	1*l*. per share	W. of Eng. & S. Wales.	Dec. 24.
East London Water-Works		Office	Jan. 10.

NOTICES TO CORRESPONDENTS.

Some observations founded on Dr. Barham's lecture on the Condition of the Mining Population of Cornwall will appear in our next.

A review of the *Glasgow Practical Mechanic and Engineers' Magazine* has been forwarded us, the extreme length of which alone would exclude it from insertion in our columns (even were we in the habit of admitting criticisms of others, which we are not), but, differing as we do from the opinions expressed, and which we cannot help attributing to personal motives, we deem this public refusal of the MS. requisite, that its unguarded insertion in any contemporary may be prevented. We regret the author should have devoted so much of his time to a futile exposition of what he is pleased to term the entire incompatibility of the Magazine to the purposes for which it was intended, as, from the talent displayed, we are satisfied the writer could have produced many articles on subjects therein noticed that would have reflected credit on our Journal. We, moreover, feel compelled to decline the paper, notwithstanding the ability we acknowledge to be evinced throughout, as we should be unmindful of the claims of our readers were we to devote two columns to a mere critical notice of a monthly magazine—one, too, of which the high opinions expressed by us have been repeatedly confirmed by competent judges, at least, so far as its little progress can afford an opportunity of judging of the ability and research displayed in its management.

"A." (East Auckland)—Mr. John Budge, of Callington, Cornwall, is the author of the *Practical Miners' Guide*, and who will readily afford any information respecting the subjects so cleverly treated on in that work.

Several letters received by this morning's post are necessarily postponed.

In the letter on the Cata Branca Company, inserted in our last, for investment in *shares*, read *slaves*.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, DECEMBER 4, 1841.

In following up the series of Statistical Tables which we purpose giving through the medium of our columns, the better to illustrate the position of our home mines compared with those abroad, we now refer to a statement of the average prices obtained for the past three years from the several mines, the ores from which have been sold by public ticketing at Cornwall and Swansea, with annexed columns, showing the increase or decrease in the prices of the produce for the years ending 30th June, 1839, and 1841. It is unnecessary to make any observation on this table, as various causes may be adduced for the increase or decrease in price, the real and important question to the adventurer being the aggregate quantity of ores raised and produce in money, which have already appeared in a late Number, the present statement being drawn up rather as illustrative of the comparative quality of the ores produced from the respective mines, and the alteration which may have taken place, having reference to the standard. The highest price obtained during the past three years for Cornish ores, it will be observed, was 12*l*. 16s. 11d., being the average price for 1839 of the Levant Mine; the average standard and produce of which year, as shown by another table, was—produce, 7¾; standard, 110*l*. 2s., while the price realised in 1841 was 11*l*. 3s., with an average produce of 7½, and standard of 119*l*. 6s. Upon looking to the Swansea Ticketings, we find that ores from Chili, in the year 1841, reached 23*l*. 19s. per ton, with an average produce of 17$\frac{7}{10}$, and standard of 97*l*. 13s., while the ores of Cuba, in the three years, ranged from 14*l*. 12s. 4d. to 18*l*. 9s. 3d. per ton. The next table to which we have to direct attention, is the monthly standard for three years, giving the highest and lowest standard for the entire period; on reference to which it will be seen, that, in September, 1840, the standard was depressed to 100*l*. 17s., with a produce of 7½, while, in June, 1841, it had advanced to 129*l*. 11s., with a produce of 7½. As our object is alone to place before our readers statistical tables on which they may found their own conclusions as to the position of our home mines, and the necessity (if any) of adopting measures of a protective nature, we avoid making any observations, but shall continue to collect such other evidence as may be found to bear on the subject at issue.

It is now some months since we directed attention to the operations of the company formed for working the coal measures at Languin, and also the erection of iron works based on the contemplated production from the collieries—ironstone of a superior quality being abundant within the limits of the "concession" granted to the company. We then entered, at some length, on the prospects presented by the reports of the engineer (Mr. NIXON) and others—at the same time expressing ourselves somewhat dubitable as to the propriety of adopting the recommendation of certain parties connected with the undertaking, that of immediately erecting blast-furnaces—a recommendation from which, it is only due to Mr. NIXON to state, he was exempt; the surveys lately made by Mr. GEDDES, of Edinburgh, and Messrs. MANBY BROTHERS, now before us, fully justify the caution we then considered necessary to impress on the shareholders.

The reports of Mr. GEDDES and Messrs. MANBY, on which we can only make a few cursory observations on the present occasion, involve one or two important considerations especially deserving the attention of the proprietors, more particularly at the present moment, when the iron trade is so seriously depressed, while we may express our conviction that the proprietors will do well to pause ere they outlay their money in the erection of iron works. The report of Mr. GEDDES is drawn up in a sensible and straightforward manner, without prejudice or bias, from which it appears that this gentleman was employed by the Edinburgh proprietors of the Languin Coal and Iron Company to report on the "winning" of the colliery, and who, Mr. GEDDES gently hints, would have done well had they caused a report to be made on the property before they embarked their capital—however, such being done, he does not hesitate to say that they must make the best of a bad bargain, and accordingly proceeds, after narrating the nature of the several works, to give them some prudent counsel, and to caution them against further outlay beyond that indispensably necessary, in the further opening of the coal-field—a caution we most earnestly recommend to the adoption of the shareholders, although Messrs. MANBY would, doubtless, by their report, if not coupled with that of Mr. GEDDES, lead the proprietors to erect furnaces for the manufacture of iron at Nantes, with anthracite from South Wales—a question at which we shall presently arrive, when considering Messrs. MANBY'S report.

In describing the several pits, and the nature of the workings, Mr. GEDDES remarks on the heavy expense attendant on timbering the galleries, from the soft and friable nature of the coal, which he observes is much beyond that of any other coal district with which he is acquainted; the coal, the cost of raising which he estimates at from 10s. 6d. to 12s. per ton, however, is highly esteemed at Nantes, where 25s. per ton is obtained, and its properties in the manufacture of iron appear to have been satisfactorily tested at La Jahottière, during the working of the furnace there, but which was suspended from the supply of coal being inadequate. Mr. GEDDES then proceeds to observe on the "real uncertainty as to the actual produce of coal to be depended on from any given area, or within any specified period," there not being ten yards of coal uniform in thickness—a seam which measured twelve and half feet in thickness being found at forty-one feet distance in one direction to have been reduced to only four feet, and at five feet distance in the opposite direction to be entirely "nipped out." Other instances are afforded of the variableness in the thickness of the measures, the coal having been found, in twelve yards, to vary from four feet to thirteen inches.

We do not propose following the report, as affects the coal working, or the irregularity of the veins or seams—indeed, Mr GEDDES says, it is not necessary to comment on the details given, "to prove the very precarious supply of coal to be obtained from veins so irregular, and so frequently nipped out;" but, he observes, "it is very necessary to keep broadly in view how unavoidably great may be the expense of labour and timber in exploring the galleries to open up a field of coal," and further adds, "I would have the proprietors not to expect much coal to be put out during the next twelve months, as matters are by no means so advanced at the colliery as to enable that to be obtained," the present "out-put" not exceeding eight tons per diem, but which he considers may amount in the next twelve months from 2500 to 5000 tons.

To effect this, however, it will become necessary to expend at least 7000*l*. in prosecuting the several works, as it will, in all probability, require nine to twelve months to unwater the old pits to their present depth, and deepen them, so as to give access to the coal veins below the old workings. This amount is "exclusive of what of the machinery may yet be unpaid;" although, as Mr. GEDDES observes, "if the different coals turn out well, there may be an out-put in the second year, which will meet the interest of capital outlaid, and also, it is to be hoped, warrant a dividend;" "yet," he continues, "it must be plain, from the facts detailed, that there is considerable doubt as to the real capability of the Languin veins of coal yielding a steady supply for sale, and, therefore, it appears (to him) not to be for the interest of the proprietors, at present, to increase their outlay by building blast-furnaces, but, on the contrary, it would be well first to have the experience of one or two years' working and selling coal, and, from such experience, to judge from the profit arising what further benefit would probably arise from iron making." In another part of his report he strongly impresses on the proprietors the impolicy of expending money in the erection of even one blast-furnace, and, consequently, thinks it "premature to entertain any estimate of the profit to be derived by iron making." With respect to the quality and properties of the iron ore, Mr. GEDDES expresses his opinion that a furnace using the description of ore found at Languin "will not yield one-half that produced from the Scotch blackband ironstone." In any view, before resolving on an iron work, he suggests "the propriety of first getting a fixed extent of lime and and ironstone fields"—a point which appears to us to have been not clearly understood by Mr. GEDDES, and on subject of which we have only to direct attention to the prospectus of the company and the report of Messrs. MANBY, which we shall presently proceed to notice. The estimate of the cost of iron, and charges to Nantes, according to Mr. GEDDES, is 4*l*. 16s. 11d., the manufacture of which would involve a further outlay of capital of 30,000*l*., beyond that required for the colliery operations.

In closing the report, Mr. GEDDES observes, that he is "unwilling to abandon the hope that yet the mines of Languin may be sufficiently productive, by the application of further capital," and thus proceeds—

> But such a hope would be practically given up in the estimation of strangers, if foreign coal were carried to Languin at present, and it will readily occur, that were the use of foreign coal once introduced at Languin, a certain amount of the company's capital would necessarily be diverted to that new channel of business, and the attention and efforts of the managers of the concern would be, to a certain extent, withdrawn from the more immediate prosecution of the works at Languin. It will also occur that building iron furnaces in France to be supplied with foreign coal is an entirely new feature in the company's matters, or rather, is altogether beyond their prospectus, and was not contemplated when they agreed to purchase Languin Concession, so that while I have not been furnished with all the details as to price of coals in Wales, carriage to Nantes, and thence to Languin, &c., to instruct the probable cost of making iron therewith at Languin, I must express my doubt, whether were the use of foreign coal agreed to by the company, it would not be preferable to erect the iron furnaces at or near to Nantes, rather than at Languin, and I feel confident the cost of coal will not be less than is stated in the foregoing estimate; while it is plain, if war were to take place, the capital embarked might be long unproductive; and even in peace, it is by no means improbable that a high duty might be laid on coal imported from Britain into France for iron making; but apart from such considerations, in the yet half-won state of Languin Colliery, I cannot advise the leaving off any part of it to make way for the application of foreign coal to iron making with the ore of La Jahottière, and must therefore in conclusion, again state to the proprietors my opinion, that it is decidedly expedient for them to direct their capital and energies for a time to the clearing out and deepening of the pits herein suggested, and to postpone the consideration of blast-furnaces till the capabilities of the coal-field of Languin have been fairly tested.

With this extract we must close our notice of Mr. GEDDES'S report, although there is much other matter worthy of note, and proceed to offer some few observations on that of Messrs. MANBY, which is confined more particularly to the manufacture of iron, and which comprehends the introduction of the anthracite of South Wales, partially or wholly, in the make of iron from the Languin ore.

We now, then, arrive at the report of Messrs. MANBY, which, as we have already observed, is directed more particularly to the proposed iron works, and this we propose to dissect. The collieries possessed by the company are dismissed in one brief paragraph, from which we learn that "there is at least enough coal for two furnaces." Having remarked on the quality of the coke produced from the Languin coal, the report enters upon the product of iron ore in the vicinity, which is said to yield 48 per cent. by analysis, although only giving but 40 per cent. in the charcoal furnace. On the facilities and light cost at which this ore may be obtained, we have the following note:—

> It may be useful to explain that it is not necessary that you should take your supply of ore within the Languin Concession; but according to the French laws, you can work any mineral deposit on payment to the landlord of a royalty; which, in case of contestation, is fixed by arbitrators according to custom and precedents. In the neighbourhood of Languin that royalty varies from 2¼d. to 3¼d. per ton.

We here stop for a moment to consider the value of the note we have just quoted. By this representation of Messrs. MANBY—one founded on fact, for it is in strict accordance with the French laws—any person or company, without the advantages acquired at a considerable cost by the Languin proprietors, "can work any mineral deposit, on payment to the landlord of a royalty," in that neighbourhood, varying from 2¼d. to 3¼d. per ton. Thus the new adventurer is upon equal terms with the Languin Company in the construction of new iron works, contemplating the use of foreign coal—with this advantage, that his capital is entire, and at his own command—but more of this anon.

Iron, it is stated in the report, may be made to profit, whether from Languin or *English* fuel, or a mixture of both. The cost of the Languin coal Messrs. MANBY do not presume, from their own knowledge, to estimate, but, assuming Mr. NIXON'S data, they calculate at 10s. per ton, which, according to the figures given of cost of manufacture of coke, is 1*l*. 1s. 7d. per ton, delivered at Nort: iron ore is estimated at 7s. per ton delivered, and limestone at 5s. Upon these data the cost of manufacture, with Languin coal, would be 3*l*. 12s. 6d., delivered at Nantes, which, it is stated in the report, cannot, "under the most unfavourable circumstances," be exceeded beyond 7s. 6d. per ton. "The number of furnaces (it is said) need not be limited to what the Languin Colliery will supply with fuel, for, it will be seen by the annexed calculations, that Welsh anthracite can be used with almost equal advantage, and the supply of iron ore may be considered as unlimited."

Assuming the report of Messrs. MANBY to be correct, and of which we do not for a moment entertain a doubt, for the practical knowledge of those gentlemen would, with us, be a sufficient voucher, even was not their report confirmed by others who possess a perfect knowledge of the locality—we, then, would inquire, in what advantageous position (except the holding of the Languin Colliery) does the company stand over any capitalist who may think fit to erect furnaces in the neighbourhood of Nantes, who, importing Welsh anthracite, *demands* a "concession," or acquires the right, under the French laws, of obtaining iron ore on payment of an insignificant royalty? Why, it must be manifest, that, without the Languin Company can secure a monopoly, by possessing themselves of the entire district, or prohibiting others from importing anthracite or other coal at Nantes, all their vaunted advantages are gone, and they merely expend their money to point out to others the path of realising a fortune, if such is to be the result of manufacturing iron in France with coal from this country.

We cannot afford space to do the subject or Messrs. MANBY justice, without entering into the calculations which are embodied in the report, having reference to the several descriptions of fuel used, and the profits on the make of 30,000 tons a-year, although the demand at Nantes for English pig does not exceed 1000 tons. We may, however, note that the erection of one furnace would be attended with a cost of 13,000*l*., or 30,000*l*. for four furnaces, and that of a foundry 10,000*l*., which latter, it is said, would yield an additional profit of 6000*l*. to 8000*l*. per annum.

We think we have said enough to cause the shareholders to look before they leap. Nearly 100,000*l*. have been expended in this concern, and the result is, that, with a doubtful colliery, the recommendation of Mr. GEDDES is that of confining the further expenditure to fully proving it, while Messrs. MANBY say, should Languin fail you, the anthracite of South Wales is just as good for the manufacture of iron. We have only just received the reports, which, we believe, are not yet circulated, and for which we are indebted to the chairman of the company.

The depression in the iron trade is daily developing itself more and more, not only by the reduction of the "make," and the resolutions arrived at in Staffordshire and Scotland by the iron-masters of blowing out furnaces to the extent of one-fourth, but, unfortunately, by the manifestation on the part of the operatives of a "strike," the wages having been lowered in consequence of the depreciation in price. We are not now prepared to enter on the question, whether the present price of iron justifies the reduction of cost of labour, which applies not only to the manufacture of the metal but the raising of the raw material, but, with facts before us, and which are incontrovertible, we must arrive at one of two conclusions—either that the price obtained by the iron-master heretofore was one which fully warranted an advance in wages to the collier, miner, and furnace keeper, as well as to fillers, labourers, and others employed in the several departments, which they did not get, and hence an injustice done to the operative, while the capitalist was realising a fortune—or that such advances having been made, the operative now unjustly complains that with a fall in the price of iron there should be a correspondent reduction in the value of labour. We have already said we are not prepared to enter on this question, inasmuch that we are not in possession of sufficient data to warrant us in offering an opinion; yet it will, we believe, be admitted that the wages earned by the collier and miner in the iron districts have been far beyond those obtained in other manufactures, and it is, therefore, with extreme regret we have to notice the "turn out" at the Rhymney Iron Works, noticed in our columns of to-day.

The loss and injury inflicted by this step on the part of the workmen, is not confined to the mere suspension of the operations, and the consequent loss of any supposed profit, for, if such were the only result, we doubt not but that the proprietors would deem such measure one far from having an injurious tendency. Instead of paying their thousands monthly in the employment of the workmen, whereby daily increasing losses are sustained from the state of the markets, they would feel that the employed had separated the tie which should at all times exist between them and the employer, and thus the ills which might otherwise have been avoided, at the sacrifice of the latter, were solely attributable to those whose interest should be considered as co-equal with the masters—capital and labour being equally and fairly represented and remunerated—for it cannot be for a moment imagined that the capitalist can be taxed by supplying manufactures at a loss, merely to give employment to the operative.

We have said that the suspension of operations, if considered with reference to any imaginary profit attendant on the active working of the concern, is not the mere question—others of a far more important nature are consequent on such suspension—a fact too well known and too oft acted upon by those with whom a strike of this nature originates. The suspension of operations involve the blowing out of furnaces from want of supply of raw materials—a course which, we need hardly say, is attended with a heavy expense; the cessation of operations underground in the getting of coal and ironstone, in like manner, is attended with considerable cost, from the levels and underground workings falling in—thus requiring not only money, but time, to repair the injury sustained; in the meantime the expenses of management and agency must go on, and, further, the heavy *minimum* rents or royalty to which the several works are subjected, it being even more politic, in many cases, to carry on works with a certain loss attendant the manufacture of iron, than to be subjected to heavy dead rents, and the expenses of again putting the furnaces into blast and rallying again an operative force.

Much, indeed, could be said on this subject, and it is with sorrow we find that at the works of the Rhymney Iron Company the misguided men have resolved on abandoning the interests of their employers, and, as report goes, are endeavouring to induce others to follow their example. There must ever be a bond of union between the workman and the master, which should be based on reciprocative interests. If prices be high, let labour be advanced—if, on the other hand, prices be depressed, then must labour descend in the same scale. We trust that, ere another week elapses, some arrangement will have been entered into—that the real state of things will present themselves to those who have forgotten their duty to their employers, and to their own wives and families—and that we shall have to announce the return to their employment, convinced, as they must be, that there is but one interest, which must at all times be dependent on a strict accordance of justice being meted out to the employer and the employed.

MINING STATISTICS.

TABLE SHOWING THE EXTREME PRICES OBTAINED BY THE RESPECTIVE MINES WHOSE PRODUCE HAS BEEN SOLD BY PUBLIC TICKETING

For the years ending 30th June, 1839, 1840, and 1841.

The increase or decrease is shown as on the sales of 1841 over those of 1839.

CORNWALL.	1839.	1840.	1841.	Increase.	Decrease.
Buller and Beauchamp	£5 18 8	£5 8 0	£5 4 0		£0 14 8
Busy	3 10 1	2 18 0	3 4 0		0 6 1
Burrow	2 9 4	1 14 10			0 14 6
Bazeley's Ore		4 4 9	2 6 9		1 18 0
Botallack			2 5 6		
Consolidated	£6 10 10	£5 12 6	£6 8 0		£0 2
Copper Bottom	£5 15 7				
Carn Brea	£6 6 7	£5 11 9	£6 11 6	£0 4 11	
Carharrack and Maiden	£4 1 8	£4 15 0	£6 9 6	£2 7 10	
Cook's Kitchen	£4 4 2	£3 14 7	£3 18 0		£0 6
Cuddra			£1 14 6		
Curtis	£4 14 9	£3 19 4			£0 15
Clifford		£7 13 10	£8 19 6	£1 5 8	
Cudlip's Ore		£9 3 10	£6 18 6		£2 4
Carzise		£5 3 2	£6 11 0	£1 7 10	
Dolcoath	£4 16 4	£3 16 4	£5 0 0	£0 3 8	
Dunkeld	£7 12 4	£2 6 3	£8 15 6	£1 3 2	
Darlington	£6 17 8	£6 7 1	£6 8 0		£0 9 8
Damsel	£4 6 9	£4 1 6	£4 16 0	£0 9 3	
East Wheal Crofty	£4 14 2	£4 11 5	£5 6 0	£0 11 10	
East Pool	£7 5 5	£7 0 0	£7 13 6	£0 7 7	
Ellen	£4 4 11	£3 12 7	£4 6 0	£0 1 1	
East Crinnis	£5 6 9	£3 16 11	£4 14 6		£0 12 3
Fowey Consols	£5 16 3	£5 9 4	£6 2 6	£0 6 3	
Great St. George	£3 12 7	£3 1 9			£0 10 10
Great Wheal Fortune	£5 12 6	£4 16 8			£0 13 10
Godolphin	£8 3 0	£6 9 1	£6 10 0		£1 13 0
Great Wheal Charlotte	£3 12 0	£3 19 6	£4 2 6	£0 10 6	
Gorland	£7 2 6	£6 19 1	£7 18 0	£0 16 0	
Great Work	£9 15 3	£8 4 2	£10 17 0	£1 1 9	
Great Wheal Prosper	£5 14 2	£4 10 9	£*5 18 6	£0 4 4	
Hallenbeagle	£4 4 2	£3 7 1	£4 10 0	£0 5 10	
Holmbush			£8 15 6		
Harmony and Cardrew	£7 16 5	£4 15 4	£4 18 6		£2 17 11
Harriet	£4 4 2	£3 17 1	£4 8 6	£0 4 4	
Jewel	£5 15 8	£5 17 7	£5 13 6		£0 2 2
Julia	£6 14 0	£6 15 4	£6 2 0		£0 12 0
Kitty	£7 19 3	£7 6 10	£7 8 0		£0 11 3
Levant	£12 16 11	£10 15 1	£11 3 0		£1 13 11
Lydia and South Towan	£4 15 6	£3 18 10	£4 13 6		£0 2 0
Leeds	£4 19 2	£5 7 0	£4 17 0		£0 2 2
Leisure	£2 18 11	£4 13 5		£1 14 6	
Marazion	£5 15 8	£4 17 8	£7 5 6	£1 9 10	
Messer			£6 18 0		
Mary	£7 9 10	£6 12 10	£6 7 0		£1 2 10
North Roskear	£6 0 11	£6 0 1	£7 5 0	£1 4 1	
North Downs	£5 9 3	£4 15 1	£6 9 0	£0 19 9	
Osborn	£5 17 9				
Perran	£6 8 5	£5 14 2	†£4 2 0		£2 6 5
Poldice	£6 9 8	£7 7 8	£7 1 0	£0 11 3	
Providence, Wheal	£8 18 5	£7 18 10	£7 4 6		£1 13 11
Providence Mines	£6 15 3	£6 1 4	£5 6 0		£1 9 3
Prudence	£3 16 8	£3 17 4		£0 0 8	
Par Consols			£8 19 6		
Pembroke	£5 14 2	£4 4 8			£1 9 6
Plenty	£5 12 2	£5 18 5		£0 6 2	
Relistian	£7 0 8	£5 10 11	£7 2 0	£0 1 9	
Sidney Cove	£5 6 0				
South Roskear	£4 13 5	£4 13 11	£5 4 0		£0 10 7
South Wheal Basset	£5 1 4	£5 12 6	£7 10 6	£2 9 2	
South Polgooth	£7 15 6				
Stray Park	£6 13 2	£5 11 7	£6 3 0		£0 10 2
Sparrow	£5 1 10	£3 13 9	£5 6 0	£0 4 2	
South Caradon	£7 1 8	£6 5 8	‡		£0 16 0
Speed	£6 8 2	£6 1 0	£5 0 6		£1 7 8
St. Ives Consols		£6 9 6	£6 13 0	£0 3 6	
St. Andrew		£6 9 10	£4 19 6		£1 10 4
Tresavean	£5 18 6	£5 11 11	£5 17 0		£0 1 6
Tolgus	£3 10 10				
Trethellan	£3 12 0	£3 17 8	£4 5 0	£0 13 0	
Trewavas	£6 11 10	£6 3 2	£6 17 0	£0 5 2	
Tincroft	£3 10 6	£3 10 7	£3 14 0	£0 3 6	
Treleigh Consols	£4 16 3	£4 9 11	£4 17 0	£0 0 9	
Tretoil & Wheal Change	£8 18 0	§£6 14 8	£6 8 6		£2 9 6
Trevaskus	£7 15 7	£7 7 6	£10 3 0	£2 7 5	
Treasury	£4 17 8	£3 18 8	£3 14 0		£1 2 8
Tehidy	£5 0 6	£5 12 8	£7 1 0	£2 0 6	
Trenwith	£6 8 4	£5 2 2			£1 6 2
Tregothnan Consols		£6 7 11	£5 4 0		£1 3 11
United Mines	£6 2 11	£6 8 0	£6 10 0	£0 7 1	
United Hills	£5 4 2	£4 13 7	£5 11 0	£0 6 10	
Unity Wood and Union	£5 12 7	£5 0 7	‖£6 5 6	£0 12 11	
Virgin	£5 7 3	£4 17 10	£6 5 0	£0 17 9	
Vor	£5 14 3	£4 0 7	£3 16 0		£1 18 9
Vyvyan	£3 3 6	£4 5 9	£4 4 6	£1 1 0	
West Wheal Jewel	£5 16 9	£8 14 2	£7 18 6	£1 7 9	
Sundry mines	£3 3 6	£2 13 6	£4 8 5		
SWANSEA.					
Cobre	£8 4 11	£6 10 2	£6 0 0		£2 4 11
Cuba	£8 9 3	£4 12 4	£8 8 0		£0 1 3
Santiago		£6 18 11	£6 0 0		£0 18 11
Copiapo	£8 7 9	£0 3 8	£3 19 0	£5 11 3	
Chili	£1 12 8	£8 8 0	£3 0 0	£1 7 4	
Valparaiso	£1 10 4	£9 7 3	£1 12 6	£0 2 2	
Coquimba	£3 12 9				
Cobija	£6 15 0				
Florence		£6 17 6			
Havannah			£2 13 6		
America			£5 14 6		
Mexican	£0 8 1				
Melancrythan			£3 7 0		
Norway	£3 19 8	£9 6 7	£9 1 0		£4 18 8
Knockmahon	£7 19 2	£7 9 3	£8 11 0	£0 11 10	
Allihies	£8 17 6	£8 12 11	£9 6 0	£0 8 6	
Ballymurtagh	£3 2 11	£2 10 9	£2 7 6		£0 15 5
Ballygahan	£2 18 7	£2 1 6			£0 17 1
Connorree	£4 11 6	£3 8 4	£11 7 6	£6 16 0	
Cronebane	£5 2 2	£4 17 10	£4 9 0		£0 13 2
Cosheen	£0 6 0		£9 8 6		£0 17 6
Kenmare			£6 2 0		
Lackamore	£0 12 5	£8 0 0	£9 8 6		£1 5 11
Tigrony	£4 9 4	£3 12 4	£4 1 6		£0 7 10
Anglesea		£2 16 10			
Cwm	£4 17 0				
Dolgelly	£5 12 7	£4 17 1			£0 15 6
Drws-y-coed	£7 1 8	£6 4 5			£0 17 3
Llandidno	£6 19 2	£6 18 3	£5 18 6		£1 0 8
Llwydd	£5 13 10	£5 17 8	£5 14 0	£0 0 2	
Llanberis	£4 6 11	£3 4 2			£1 2 9
Llwyndu			£3 13 0		
Llandegai	£8 19 4				
Laxey (Isle of Man)	£2 9 7	£2 1 8	£2 18 6	£0 8 11	
Penrait	£7 4 0		£8 7 0		£3 17 0
Simnea Dylluan	£7 9 6	£7 7 1			£0 2 5
Sygun	£2 8 7				
Ty Gwyn	£14 0 8				
Sundry mines	£2 13 6		£6 19 6		

* Including Wheal Friendship for 1841. † Including Perran Mines for 1841.
‡ Private sales for 1841. § Tretoll only, 1840-41. ‖ Unity Wood alone for 1841.

HIGHEST AND LOWEST STANDARD AT CORNWALL TICKETINGS

For 1839, 1840, and 1841.

Month.	1839. Highest.	1839. Lowest.	1840. Highest.	1840. Lowest.	1841. Highest.	1841. Lowest.
July	£110 12 0	£104 12 0	£108 2 0	£104 15 0	£111 11 0	£108 19 0
August	106 15 0	103 10 0	110 6 0	101 17 0	113 3 0	110 12 0
September	112 11 0	108 6 0	106 12 0	100 17 0	120 9 0	114 7 0
October	114 10 0	109 9 0	110 9 0	101 7 0	120 10 0	114 7 0
November	111 14 0	107 18 0	106 1 0	103 16 0	117 15 0	114 8 0
December	116 15 0	109 14 0	110 3 0	106 2 0	125 4 0	119 13 0
January	117 6 0	112 14 0	117 8 0	105 1 0	125 4 0	122 1 0
February	116 14 0	110 10 0	116 8 0	111 14 0	125 13 0	123 4 0
March	117 7 0	110 1 0	114 15 0	113 8 0	124 10 0	121 2 0
April	114 4 0	109 14 0	110 6 0	109 2 0	124 4 0	122 6 0
May	110 4 0	105 8 0	110 11 0	107 14 0	126 15 0	122 15 0
June	108 0 0	105 19 0	110 9 0	108 14 0	129 11 0	123 16 0

AVERAGE STANDARD AT TICKETINGS IN CORNWALL AND SWANSEA

For 1839, 1840, and 1841.

	Av. stand. 1839.	Av. stand. 1840.	Av. stand. 1841.
Cornwall	£110 2 0	£108 10 0	£119 6 0
Swansea	97 4 0	94 10 0	97 13 0

AVERAGE PRODUCE AT CORNWALL AND SWANSEA TICKETINGS

For 1839, 1840, and 1841.

	1839.	1840.	1841.
Cornwall	7¾	7¼	7¼
Swansea	14¾	15	17 15/16

ORIGINAL CORRESPONDENCE.

ON THE PROPERTIES OF ANTHRACITE—ITS APPLICABILITY TO BOILER FIRES ON THE COMMON PRINCIPLE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—I hope you and your numerous readers will excuse me while I speak a few words to my friend "Scrutator." The three axioms declared in my friend's letter are as sound in truth as they are confirmed in practice, and therefore should not be called in question by any, nor should any labour to controvert them, lest they should darken counsel by speaking words without knowledge. "Anthracite humbug" we do not understand, nor do we relish the expression, because such words are not found in the anthracitous vocabulary, nor do they suit the palate of a man whose food has been cooked with the smokeless anthracite. "Scrutator" has not been much used to sink pits, and at the same time to be in the same shaft so deluged with water that nearly thirty gallons each minute had to be lifted by the winding-engine that lifted the materials out in sinking through the strata. If he had, he would not have supposed that only one-fourth of the time was employed by the engine, and that three-fourths of the time the engine was standing. I can only say that the engine referred to by me has been employed both night and day, and each succeeding minute during that time has found more employment for the engine. One of the chief disadvantages alluded to in my former letter was, that we had only one rope working, so that the engine had no counter-weight acting as a balance to assist her in lifting the stuff, and especially the water, which was contained in a large barrel, between 200 and 300 gallons in size. Considering the depth, then, and the quantity of water to be lifted, besides the materials, we may take the nominal power of 37-horse as the size of the engine, and 24 cwt. of stone coal as the quantity of fuel consumed in each twelve hours, or otherwise 2 cwt. per hour—then $\frac{37}{24}$ lbs. = 6 lbs. per horse power per hour. In other calculations, and by the fitters, the power of the engine is made nominally 40-horse, but I do not wish to go beyond proper bounds in this affair.

I hope the above may exonerate me for the present, as I do intend hereafter to report on the duty of the engine and effect of the fuel, as soon as we can have a fair trial of both. The boiler is of what is called the Cornish plan, and the fire is on the common principle, so that we see the folly of the assertion—that anthracite cannot be used on the common principle of boiler fires. We have also a boiler on a new principle, and when fairly tried a report may be expected on it. U. Thompson.

Cwm Amman, Nov. 23.

THE WIRE ROPE—ITS ADVANTAGEOUS APPLICATION.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—Not having had the opportunity of witnessing the practical working of the wire rope, which, under many circumstances, appears to possess qualities of sufficient value to ensure extensive adoption, I may, perhaps, be held excused if I take the liberty of inquiring, through the medium of your Journal, whether its capability has been sufficiently tested to admit of advantageous application under the following conditions of general occurrence in mining operations:—In sinking shallow shafts or winzes, where the axle or barrel on which the rope is wound is of very small diameter, the coil being proportionate—Would it, in this case, be sufficiently flexible to be worked with the same facility as a hempen rope, and with durability similar to what it has been proved to possess when wound on a large cage or drum? In whim-shafts sunk on the course of the lode, the plane being very much inclined, say, at an angle of forty-five degrees, or more, from the perpendicular, the kibble travelling on the plank casing, without friction rollers, whereby the rope might be prevented from chafing—Has there been proof enough of its durability, under such circumstances, to admit of an honest recommendation of its use, instead of the very expensive chain commonly applied? If any of your numerous correspondents can refer to its practical working under such conditions, he will oblige, Sir, your obedient servant,

Connorree Mines, County Wicklow, Nov. 29. H. Thomas.

PROF. VIGNOLES'S LECTURE ON FOUNDATIONS—RAILWAY RECOMMENDED ACROSS THE ISTHMUS OF DARIEN.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—Will you allow me a few words on each of these interesting subjects, brought before the public in your valuable Number of Saturday last?

Every one who has made himself acquainted with the properties of concrete, must subscribe to the judicious observations which the learned and able Professor made upon the subject; but it is a question worthy of consideration, whether there is any permanent advantage in the use of hot water, in making concrete, over cold. It may be inferred that Mr. Vignoles attributes the expansion which takes place in the materials of which concrete is made to the use of hot water, but they expand also with the use of cold full an eighth of an inch in a cubic foot, which renders concrete invaluable for under pinning; but what the expansion is with hot water, and whether there is any reaction afterwards, I am unable to say. I moulded some concrete made with cold water in a case, which in a few minutes was burst open, whereby the question of expansion was determined, no reaction whatever having, after the lapse of a considerable time, taken place.

If concrete is suitable, yes, now become almost indispensable, for buildings—settlements in which only affect property—how much more essential is its use in making the foundations of railways, subsidence in which involves human life; and I fearlessly assert, that if this valuable material had been used instead of loose gravel, or no prepared foundation at all, the sacrifice of human life about two years ago near Brentwood, and near Winchester, and recently near Cuckfield (not to speak of the many instances thereof on the Birmingham and other lines so long back as to be nearly out of memory), would not have occurred. Mr. Vignoles, who is now, I have understood, a convert to the use of such a foundation for railways, probably includes the want of it in the "bad management" in railways of which he speaks, and I regret that this subject did not form a prominent part of the lecture of which you render an account. This gentleman, shortly after my patent was taken out for combining longitudinal wooden bearers with a concrete foundation (the vast importance of which I saw almost from the commencement of the construction of railways), published a plan of longitudinal bearers on a gravel foundation, on the incompleteness and inefficiency whereof I felt it my duty at the time publicly to animadvert; and I should now hope it is his intention at an early period to raise his powerful voice in favour of a system of construction which most felicitously combines the preservation of human life, with vast economy. Mr. Giles told me, not long since, that he had reflected much on the subjected, and admitted the philosophy of the plan; Dr. Birkbeck, after a lecture I delivered at the Mechanics' Institution, Southampton-buildings, on the subject, did me the unexpected honour of addressing the auditory, consisting of about 700 persons, and expressing his decided opinion that the plan I had propounded was an object of real national importance; I was told by a friend, that Bryan Donkin, Esq. (whose scientific acquirements I esteem of the highest order), sent a message by him to Mr. Gravat, then the engineer to the Bristol and Exeter Railway, and who, as well as Mr. Brunel, was a pupil of this gentleman, to be sure to use concrete and longitudinal bearers, and Mr. Brunel himself and the directors of the Great Western Railway Company, expressed themselves, as the subjoined quotations demonstrate, most decidedly in favour of the plan. In the third half-yearly report of the shareholders, on the 16th of February, 1837, the directors thus speak—

> The mode of laying the permanent rails has occupied the attention of the directors from the very commencement of their labours. Having anxiously watched the result of experiments made by other companies, they have for a long time entertained the hope of being able to avail themselves of great improvements in this branch of the system. The directors conceive that it cannot fail to be highly interesting to the proprietors, to peruse a recent report upon that subject from their engineer, and they have therefore determined to submit it to them.
>
> The following is an extract therefrom:—
>
> I beg to lay before you a statement of the comparative estimated expense of laying rails with stone blocks in the usual manner adopted upon other railways, and that of rails laid upon longitudinal bearers of wood, secured to a mass of concrete, or other artificial foundation, as recommended in my report of January 9, 1836.
>
> (Signed) J. K. Brunel.

I beg here to state that the plan thus recommended was patented and promulgated by me early in December, 1835, a full month before the date of this report; and why, after such report and recommendation, and the time that elapsed for consideration between the date of the report and that of the recommendation, the longitudinal bearers were not laid on this noble line upon a mass of concrete or other artificial or cement foundation, instead of loose gravel, which has always been giving way, is truly enigmatical. Had the report been acted upon, nearly the whole expense of "maintenance of way" which has been incurred, and is prodigious, would have been saved. I laid some rails down upon this plan at Llanelly, and during four and half years constant use not a sixpence was laid out on the road, and now the rails are as good as ever (though only common bars of iron), requiring, it is true, fresh screws, which never were so strong as they should have been, but the foundation is a perfect rock. The concrete was two feet square, but experience on the Southampton line fully satisfied me that a foot square under the bearers is quite sufficient in cuttings and on untouched ground. Embankments are different, but I now advocate their total abandonment, on the ground of both economy and safety.

The plan alluded to in the letter you did me the honour to insert in your last Number would be admirable for a railway across the Isthmus of Darien; and as the plan could there be executed much cheaper than in this country, it is well deserving the attention of merchants and others who have a direct interest in establishing a railway communication between the Atlantic and Pacific Oceans; and truly rejoiced would every friend of the human race be to see the intercourse in this part of the globe so much facilitated. The trifling cost at which the work can be executed must render the undertaking, under good management, a very profitable enterprise.

Moorgate-street, Nov. 30. Thos. Parkin, C. E.

ON STEAM-ENGINES—MR. GLOVER'S LECTURE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—In your Journal of the 20th inst. is an extract from Mr. Glover's lecture on the steam-engine, in which Mr. G., in speaking of Hero's engine, refers to those patented by Avery and others, acting on the principle of Barker's mill. Having pointed out the nature of the action of these emissive engines, Mr. G. tells his audience to judge for themselves whether it be a profitable application of the power of steam or not, but draws the conclusion that it may do in the back settlements of America, where fuel is actually cumbersome, because the small power is obtained, while the superabundant fuel is removed, thus evading the important question—how it happens that the duty of these engines is so very small? That the emissive engines of Avery, and all others upon the same principle, are, in point of economy, much inferior to those of Watt's, is a fact that cannot be doubted; but of so much more importance is it that we should be rightly informed wherein this inferiority consists, for the defect being known we are in the best position to find a remedy. If Mr. Glover, or any of your correspondents, will favour me by explaining this I shall feel much obliged. A Cornubian.

MARTIN'S REVOLVING STEAM GENERATOR.

TO THE EDITOR OF THE MINING JOURNAL.

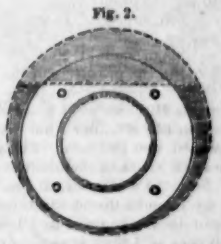
Sir,—Chemico-mechanical power is the characteristic of modern days. That which armies of men could not accomplish for want of appliances, is now being performed by a physical force, created by the might of mind. The hydraulic machine, called the steam-engine, lifts 100,000,000 lbs. of water one foot high with a single bushel of coals. From the experience of the past, we may infer that the giant may again decuple his power. The genius of invention must progress until her movements be as rapid as thought—nay, more so, as they are already; but, until the prime mover shall surpass the velocity of the mind's conceptions, there need be no *ultimatum* to power or speed. On looking into my common-place book for the year 1835, I find an entry, which I conceived about that time, and now send a copy thereof, with emendations.

Having somewhere read that metallic surfaces, acting on water as well as temperature, has something to do with the generation of steam, and having observed that a kettle, with potatoes therein, evaporated more than a boiler with water alone, evidently from the contact of surfaces, I was induced to introduce a series of vertical plates, arranged after the manner of a galvanic battery, but, on the boiling of the water, did not find the quantity of steam much, if at all, increased; just before the water began to boil, a quantity of small bubbles accumulated at the bottom of the boiler, and some of them would occasionally rise and disappear on coming in contact with the plates whilst ascending. The mass of fluid being divided into so many upright columns, prevented the formation of steam, or, rather, the transmission of it to the surface from the bottom of the boiler and the sides of the plates. My next experiment was with a circular plate, revolving in the water on a spindle; on being turned slowly round it generated steam rapidly—one-half, it should be observed, being immersed in, and the other projecting out of, the water. I had no means of testing the pressure, but only the *quantum* by sight.

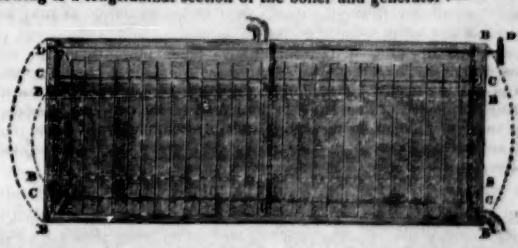
In following up this discovery, I propose the following plan for a steam-boiler, or generator:—A Cornish boiler (known as Trevithick's), or cylindrical tube, say, about forty feet by six, more or less, and inner tube three and a half feet diameter, to contain eighty flat or plane rings of copper or iron, fixed so as to revolve between (around) the inner tube and the inside of the internal surface; three of the rings to be thicker than the others, and placed one at each end, and one in the longitudinal centre of the boiler, and connected together by four iron rods, and to have teeth on their external edges to receive the teeth of three pinions, by which they are to be turned about. The annexed diagrams will explain the nature or forms of the rings.

Fig. 1.

Fig. 2.



No. 1.—One of the three main rings to revolve with rollers R round the inner tube, on rings of iron; the fire in the inner tube as usual. S, end rollers, in two only of the main rings, one being central; the dotted lines being the outer and inner circumferences of the boiler. W, water line. No. 2.—One of the thinner revolving plane rings, without rollers, fixed at right angles on three or four rods, in parts, if preferable. The following is a longitudinal section of the boiler and generator:—



Lines B are the external and internal surfaces of the containing tube or boiler; lines C are the rods for carrying the circular plates, or rings, which may be put on those rods in *semies* or smaller parts; D is the pinion-rod, set in motion from without by a wheel or handle, or weight wound up. A cylindrical (Trevithick's) boiler, 40 ft. long by 6 ft. diameter, and internal tube 3 ft. 6 in. diameter, would contain the following surface, viz.:—

Multiply the circumference 6 by 3½, say, 19 ft. by 40 ft. =	760 feet.
Ditto ditto 3·6 by 3½, say, 11 ft. by ditto =	440 ,,
Ends $6 \times 6 \times 78\frac{1}{2} = 28$ ft., less $3\frac{1}{2} \times 3\frac{1}{2} \times 78\frac{1}{2} = 19 \times 2 =$	38 ,,
Whole surface of the boiler	1238 ,,
Superficial contents of rings, $5 \times 5 = 25 \times 78\frac{1}{2}$, say, 20 ft. Less $3{\cdot}5 \times 3{\cdot}5 = 11 \times 78\frac{1}{2}$, say, 9 ft.	
Contents of each 11 × by 2 surfaces = 22 × by 80 rings, six inches apart = say	1760 feet.
(Ends included above.)	
Total surface acting on water and steam	2998 ,,

or about 3000 feet, 1800 of which consist of revolving rings alone. Perhaps the rings would also be a better conductor of heat from the central fire than water itself. If surface in the smallest space be an object, here it is. The engine-men, in some mines, are obliged to clean their boilers every six weeks, and, for that purpose, to go into and sweep them out; the rings should, therefore, perhaps, be made in parts, or a hole left to be

uppermost in the bottom. The parts might be taken out through the man-hole, and the middle main ring made to shift on the rods. As I have no convenience, perhaps some of your correspondents will test the plan.

The writer has no means of making experiments on the pressure of steam, but he understands there is much less difficulty in raising the pressure than producing the vapour from water. Might not a small second boiler be employed alongside to raise the pressure of the vapour produced by the generator? I intend, in my next, to bring the subject of permeation under the notice of the abler mathematicians and engineers, who may, indeed, only ridicule me for my midnight toil, whilst, alas! it is but few who are rewarded by Government. ALFRED T. J. MARTIN.

Penzance, Nov. 25.

CAUSE OF THE PRESENT DEPRESSED STATE OF THE SOUTHERN RAILWAYS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—As you have done me the favour to insert in your *Journal* of the 20th inst. my remarks on the Croydon Railway, I will proceed to the consideration of the Greenwich, as proposed in the letter referred to; and have so many things crowd upon me, that I must be both brief and general, that I may not unduly occupy your columns. On referring to the commencement and early progress of this first of the southern railways, I find an extraordinary degree of energy, judgment, and perseverance displayed by the first directors, similar to that already observed as having been evinced by the Croydon first directors; and being, I believe, the first railway of that peculiar structure which it bears, it must have required no ordinary degree of attention to have completed what was done, so well, in so short a time. When it was discovered that the original estimates were stated at too low a sum to allow of the effective completion of the works, it appears the proprietors became dissatisfied, as they have been in every similar case, and considered all their disappointments as the act of the directors. At a meeting held to consider the best steps to be taken under such circumstances, the proprietors, in their blind and indiscreet folly, removed the original directors, and rashly appointed an entire new body, who, however respectable they might be, and desirous to promote the interests of the company, were necessarily totally ignorant of the business they had to perform. It is much to be lamented that such an unwise course was then taken, the effects of which the proprietors are now feeling. On tracing the proceedings of the company from this period, I find what might be expected to be the case—perpetual changes and blunders, such as inexperienced persons always make, who are apt to imagine that what they alter they improve.

In their subsequent reports I find fair and plausible promises, but nothing done to answer the expectations held out—and up to this day I should consider that there was no railway company so sadly managed, in every department, as the Greenwich; the favourable prospects which on all sides present themselves are entirely neglected. On looking over your Journal, I find a short time ago the report of a trial against this company by a passenger, who obtained a verdict; the amount is trifling, but it shows the bad taste and the careless management of the company's affairs. I find also a letter from a proprietor, complaining of the negligence of the clerks in the office of the company. No person can have had business there, without perceiving instantly the insufficiency of the establishment—indeed, there appears a general incapacity to understand the important position in which the company might, and ought to, be placed. The result may be fairly seen in the present value of their shares, and which might be clearly and justly shown to arise from a mistaken, however well meant a course of the directors. But can this state of things be improved? Undoubtedly it may; and, if I am not too much intruding on your columns, I will venture to suggest to the proprietors the result of my examination, of what I have been able to obtain of the company's proceedings. This will postpone a few remarks I propose to offer on the South-Eastern Company.

Nov. 26. AN OBSERVER OF RAILWAYS.

HOLMBUSH MINE—MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I am no miner, but I take an interest in reading your *Mining Journal*, for I have embarked some hundreds, and have been further induced, by the interesting notices in your columns, to pay a visit to the West, and just to see for myself. It is true, that, under any circumstances, situated as I am (a humble tradesman), I could not expect to enlighten others, but I thought I might myself, at least, be enlightened, by ascertaining on the spot whether all was going right. I am happy to say that I have been well pleased with my visit, but as mine surveying forms one of the principal features in your Journal, I thought I would needs get some information about the necessity and value of these mathematical and geometrical questions, for I have always been the advocate for the truly practical system (as I ever considered it) which is adopted by the working miner, whose practical knowledge I have ever deemed far before the theoretical geometrician. It is only just that I should admit my error in this conclusion, as demonstrated by the following facts, which I had on the ground from those whose practical knowledge was the best recommendation to my attention.

I am, Sir, interested in the Holmbush Mine, situate near to Callington, and on visiting it, some few days since, on my way to the mines in the neighbourhood of Redruth and Camborne, I made the ordinary inquiries as to the prospects of the mine and the progress making with the new shaft. You may well judge my surprise, when I was informed that, as regards Hitchins's shaft, which was commenced from surface and rose against its two lifts, one from the eighty and the other from the sixty fathom level, and instead of boling centrally, as intended, the both rises were so far south of the shaft that it required a cross cut of three or four feet from the south side of the rise to touch the south side of the shaft! The direful consequences of this terrible error you will comprehend at a glance; they have not only all the ground (nearly forty fathoms) to sink and break, as if the rises had never been commenced, but actually a great deal more, for the bridge between the rise and shaft must all be best away. The *extra cost* occasioned by this error is considered to be full 400*l.*, besides the delay—probably of some months, and spoiling the shaft.

I have given you here a literal copy of my notes, taken at the time, as you will understand the matter better than I can pretend to do; but there is one part which, I fear, I shall become too well acquainted with, to my cost—that of the loss of time and money, owing to the want of ability or attention in sinking this shaft. Why, they had better, according to my notion, have sunk it down from surface, and said none of your "rises," as they are called; it might have taken more time, but *would* have, I dare say, cost less money than these confounded blunders. Without presuming to offer an opinion on the advantages arising from the other modes of calculation than those adopted at Holmbush, but considering that an inquiry should be instituted, I simply confine myself to the facts, and subscribe myself A TRADESMAN.

London, Dec. 3.

ON MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—To your Callington correspondent unquestionably belongs the merit, which you very justly award to him, of directing attention to mine surveying, by "agitating;" and it is pleasant to find the good effects of the agitation are becoming very perceptible to himself. His introductory letter on the subject, in December, 1840, was couched in a very different style from that in last week's Journal, which verifies the old proverb—"One is never too old to learn." The former letter was characterised by many as "cant," "blustering," &c., and with "endeavouring to involve the matter in mystery," which, I must confess, was not far from my own opinion. This last letter contrasts favourably, both as to matter and manner—its fact, makes ample amends for the former, as it places the subject in a different light—witness the following extracts from each, as they have appeared in the columns of the *Mining Journal*, in juxta-position, in proof thereof:—

EXTRACT: No. 177.

I beg leave now to address myself to gentlemen interested in mining, who have as an indispensable part of a liberal education a general knowledge of the mathematics, and by being pointing out a few of the difficulties that present themselves in making an underground survey, they will admit that the man competent to undertake this work ought to be a professed mathematician, and one of extensive practice in that peculiar department.

EXTRACT: No. 327.

This great desideratum is within the reach of every one possessing a moderate share of common arithmetical knowledge, and, as far as metallic mining is concerned, the man who can work out the solution of a recurring trigonometrical rule, and which by the help of suitable tables, and a system, in my easy operation, will find no difficulty in performing almost any other surveying operation that may be required.

The above extract, from a letter in last week's Journal, will be found in substance (very nearly in words) in *my* communication in No. 296 of the *Mining Journal*. I am, therefore, a little proud to think my scribbling may have had some hand in bringing about this late common-sense view of the subject from Mr. Hodge, and, if so, it surely cannot be construed into any want of modesty, my wishing to "let the world know" that for so much the gentleman is indebted to A WORKMAN.

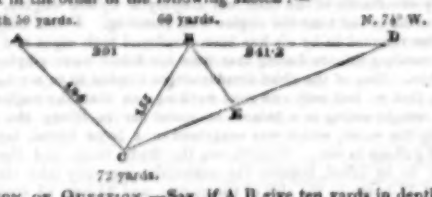
Dec. 1.

ON MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I beg leave to hand you the following answer to "A Coal Miner's" question—viz.: "Given three auger-holes to a seam of coal, with their respective depths and relative position, in a field parallel to the horizon.—Required the bearing of the dip line, as also its angle of declination?" As this does not appear a very deep question, and as trigonometry is "the order of the day," I shall, with your leave, Mr. Editor, try my hand at a trigonometrical solution of it.

The sites of auger-holes, A, B, and C, form a triangle, the respective sides of which are A B 201 yards, B C 155 yards, and C A 184 yards, somewhat in the order of the following sketch:—



SOLUTION OF QUESTION.—Say, if A B give ten yards in depth in 201 yards in length, how far must the said line be extended to give twelve yards more in depth—viz., the depth at C?—*A.* 241·2 yards—say to D. The coal, therefore, at C and D is at equal depths—hence, the line C D is at right angles with the line of dip; and a perpendicular let fall from auger-hole B, on line C D, will be the line of dip—say B E. But to find line B E by trigonometry, ∠ C B A must first be found, then subtract angle C B A from 180, leaves the ∠ C B D. We have now the two sides and angle to find the third side, C D, which last will enable him to find perpendicular B E, as also angle E B D. To find the angle of declination, we have now the horizontal line B E, and the difference of depth of coal at B and E, twelve yards, which is a perpendicular and base of right-angled triangle, to find the angles. From all of which "computations" I "guess" the answer. Bearing of dip line 56 deg. 45 min. E. of N.; angle of declination 6 deg. 40 min. from auger-hole B.

Any intelligent practical man (or "pegging captain," as they are sometimes contemptuously called) must perceive he could solve the above question very correctly (as well as some others lately propounded), with the aid of common arithmetic alone. I do not, however, for that reason, mean to say he has no need to study geometry, far from it, I could wish to see every poor, as well as every rich, man study it—the former, if for nothing else, that they might be enabled to "cut the ground from under the feet" of those impudent individuals who have the insolence to compassionate men for their ignorance, whose abilities and acquirements are much superior to their own. A WORKMAN.

Nov. 17.

ON MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have perused Mr. Knox's solution of his "General Problem," and also that of "A Miner's," likewise that of "M. S.'s," as requested by Mr. Knox, but do not find that the "General Formula" I have given in No. 325 of the *Mining Journal* is erroneous. As this is a problem of some importance to the miner, I will, with your permission, endeavour to give a demonstration of it.

Fig. 1.

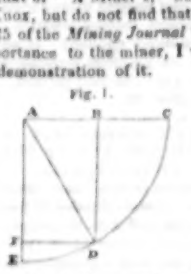


Fig. 2.

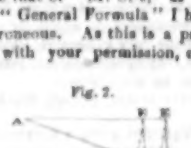
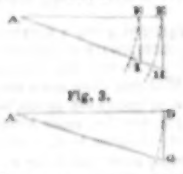


Fig. 3.



On a horizontal plane, under which lies a seam of coal (or another plane) inclined to the horizon, let there be a line A C (*fig.* 1) drawn in the direction of the level of the seam of coal, and at right angles to A C draw A E in the direction of the dip; let A D be any bearing whose declination is required; now draw F D and B D parallel to A B and A E, then will B D = A F. Let the two planes be in contact along the line A C, and let there be three plummets suspended from the points D, E, F, in the upper plane, so as to reach the lower in the points G, H, I; then, if vertical sections be cut through both planes, along the lines A E and A D, these two sections will be right-angled triangles, as shown at *figs.* 2 and 3, having the right angles at E and D. Now, because the angles contained between the planes at A and B (*fig.* 1) are equal, also B D = A F, the two plumb lines suspended from D and F are also equal. By inspecting *fig.* 1 we shall see that if we make A E radius, A F will = cosine of the angle or arc E D, which is the angle the proposed bearing makes with the dip line on the horizontal plane. Now, in section (*fig.* 2) making A E radius, E H will = tangent of the ∠ of the dip line, and F I will be tangent to same angle, having A F for radius, which radius is equal to cosine of the horizontal angle contained between the dip line and the bearing whose declination is required. By similar triangles (*fig.* 2), A E : E H :: A F : F I; or, radius : tangent of ∠ of declination of dip line :: cosine of ∠ contained between the dip line and proposed bearing whose declination is required : tangent of ∠ of required declination; for F I (*fig.* 2) = D G (*fig.* 3) and D G = tangent of declination of the proposed bearing A D (*fig.* 1).

Dip may be defined to be the perpendicular to any constant base, the hypothenuse of the same base being the inclined line or plane having such dip—hence the fallacy of Mr. Knox and others making use of sines in their solutions of this question. A COAL MINER.

Hindley, Nov. 23.

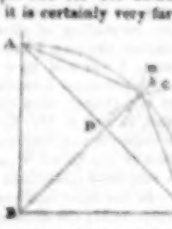
ON MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I hold that the most simple method, if it be correct, is the best, but your correspondent, "A Workman," has not stuck to this rule exactly, for although he has adopted a very simple one for the solution of his problem, by the "scale of equal parts," it is certainly very far from being a correct one; for suppose in the right-angled triangle A, B, C, the radius B A and B C be equal to 60, taken from a scale of equal parts, then take in the compasses 45 from the same scale, and strike the arc *c*, the foot of the compasses being at C, then, with the same distance, strike the arc *a*, the foot of the compasses being at A, whence it will be found that A *a* = C *c* = *a c* = are A C—from which it is evident that 45 and 45 are not equal to 90. This may be proved by the following very simple method:—$\sqrt{(A B^2 + B C^2)} = A C \div 2 = A D$; then, $\sqrt{(A D^2 + D b)} = A b$ or C *b* = 45·921 on the same scale, from which it is evident that the degrees on the arc cannot be taken off from a scale of equal parts, but only from a scale of chords.—I intend to send you a solution of Mr. Hodge's question in a day or two.

Hucknall, Nov. 29. A MINER.

P.S.—You have mistaken my peculiar way of making ½—I have been in the habit of making it as printed by you in my letter of the 16th inst.



ON MINE SURVEYING.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—It will, perhaps, appear strange to some of the readers of your Journal, who have taken an interest in the questions which have appeared from time to time on mine surveying, that such widely different answers should have been given to some of them. In my answer to "A Coal Miner's" question I make the bearing of the dip of the coal to be N. 74° 24′ W., while others make it N. 58° 24′ E. (a material difference indeed). Now, this difference arises from the method of constructing the triangle given by the proposer. Your Wingate correspondent, and others, have assumed C on the east of north, while I supposed it to be the west of north, because the bearing of the line A B was given N. 7½ W. My object in this communication is to draw the attention of the proposers of questions to the subject, so as they may describe them in a manner that we all may comprehend them alike, and not run athwart of each other, as has been the case. M. S.

Newcastle-on-Tyne, Dec. 1.

WOOD PAVING—MR. PARKIN AND THE COUNT DE LISLE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—My attention has been accidentally directed to a letter, signed T. Parkin, which appeared in your columns on the 20th November last. Had I been apprised of its existence earlier, I should not have permitted so many days to have elapsed before sending you my reply; I believe no public writer, with the exception of Mr. Parkin, would have omitted to send a copy of his attack to the party assailed; he, however, sets every rule of courtesy, as well as of controversy, at defiance. It would be an unprofitable waste of time to follow your correspondent through every misrepresentation contained in his letter, I will, therefore, state the facts as briefly as possible, and leave your readers to deduce their own conclusions. I was invited by the presiding officers of the Southwark Literary Institution to give a lecture on "Wood Paving," on the 10th November last, in order to fill up an accidental vacancy, which was occasioned by the unavoidable absence of a gentleman, who would otherwise have occupied that evening with a much pleasanter theme. My advocacy of the system invented by the Count de Lisle was perfectly well known to those gentlemen, who had not the less confidence in my impartiality, as a public lecturer, on that account; and my preference for that system, wholly independent of personal consideration, was sustained not more by reasoning than facts—a position which, it appears, Mr. Parkin would admit to be the true one, provided his name were substituted for that of the Count de Lisle; but, to prevent the imputation of any improper motives by those who, like your correspondent, view everything through a medium perverted by their own peculiarity of thought and feeling, I invited the attendance of those gentlemen whose inventions I proposed to examine, and privately, as well as publicly, declared my readiness to defend the positions I should assume; but, as my lecture was avowedly confined, in its demonstrative illustrations, to the various methods of wood paving practically introduced into the metropolis—as it never even involved the mention of Mr. Parkin—it would have been as insulting as absurd to have given that patentee, or any other beyond those directly interested, the trouble to attend.

Where Mr. Parkin obtained the report from which he quotes sentences which I never uttered, I cannot imagine, as there has not been a sufficiently correct report of my lecture published to admit of any quotations being given in the precise words of the lecturer; and to remedy this defect, as well as to supply information which could not be comprised in a single lecture, I have been urged, and have consented, to publish a *Treatise on Wood Paving*, which may afford appropriate data for temperate and honest discussion.

Why Mr. Parkin should endeavour to ingraft upon my lecture any dispute he may have had with Mr. Hodgson, or the licensees of the Count de Lisle's system, it would be difficult to determine—it is much easier to confute him upon the main point. He would have it assumed that, to use his own words, he is at this moment "carrying on legal proceedings against my immaculate employers for their extensive infringement of his patent." What are the real facts of the case? On the 16th and 17th of January, 1840, a motion was heard in the Vice-Chancellor's Court, upon which motion Mr. Parkin, as the plaintiff, contested the right of the licensees to use the Count de Lisle's system of wood paving, which he (Mr. Parkin) claimed as part of his own; and I find in the *Mechanics' Magazine*, of the 15th February, 1840, the judgment delivered by the Vice-Chancellor upon that occasion, from which, leaving your readers to refer to the whole, I will make two or three extracts:—

> I cannot but think, that, on such a patent as this, before the court does any thing so as to interfere against the defendants, it ought to take some method to have it established that the plaintiff has got that legal right which he pretends to have. * * * Now, with respect to the defendant's (Hodgson's) invention, as I understand it from his specification, it is a precise and definite thing, and is an invention, by means of cutting a cube in a certain manner, which is detailed in the specification itself. * * * I cannot but think that he, *prima facie* at least, has invented a definite thing, which does materially differ from the very vague and indefinite thing which the plaintiff has described to his specification. Now I think, therefore, that, before I interfere by injunction, I ought to direct the plaintiff to bring such action as he may be advised; in that action he will have, in the first place, to make out that his patent is a good and legal patent; and then he will have to make out that by the act which the defendant has actually done, if the patent be good, it has been infringed, &c.

Let me add, that, having mentioned your correspondent's letter to the proper parties, I find that Mr. Parkin has not moved a single step in the matter up to this date—a period of nearly two years. Can anything be more conclusive?

Mr. Parkin's defiance to meet him in a public discussion on the subject, I decline to test; he has no claim to any personal consideration from me, even if I could ever be induced to enter upon the investigation of a scientific question in a spirit of hostility. Passion is invariably a bad reasoner; and I venture to suggest to Mr. Parkin, that, at his time of life, and looking at the sphere of society in which he has moved, he would be more likely to win respect, if he permitted truth to dictate his epistles, and civility to guide his pen. J. LEE STEVENS.

4, *Grosvenor Wharf, Millbank, Dec.* 1.

ON PREVENTING THE BURSTING OF BOILERS.

TO THE EDITOR OF THE WEST BRITON.

SIR,—The lamentable accident which lately occurred at Wheal St. Andrew, in Phillack, by the bursting of the boiler of the steam-engine, as well as the tremendous loss of life from a similar cause at Manchester a few days since, leads me to address a few observations upon the subject, in the hope, if no certain preventive can be brought into operation, of at least inducing more caution on the part of the men having the charge of such engines. There can be little doubt, notwithstanding the assertions made to the contrary at various coroners' inquests, that the bursting of boilers is in every instance attributable to a lack of water, in which case the plates becoming overheated, abstract the oxygen of the water remaining, and liberate the hydrogen gas, the boiler being the receiver. In this state of things certain destruction must quickly follow, for whilst an explosive gas, great beyond all calculation, accumulates, the work of destruction proceeds by the rapid conversion of the plates into the protoxide of iron, through the decomposition of the water, by which means a channel is soon made for the introduction of fire and atmospheric air, nothing more being necessary to produce an explosion, which must render sugstory safety-valves and every other invention of man.

It was stated, and I believe it remained uncontradicted, upon the investigation caused by the bursting of the boilers of the *Victoria* steamer, that there was no lack of water; but it was likewise in evidence that throughout the whole of the morning, there was much difficulty experienced in raising steam, and that the plates were greatly overheated. Now this is consistent with the fact, that there was a want of water, for had there been a sufficiency neither the one nor the other could have happened.

Mr. Perkes, a gentleman of great experience and mechanical knowledge, in a lecture, which he lately delivered at the Mechanics' Institute, in London, spoke of an accident which occurred in the North, from the explosion of a boiler, as being perfectly unaccountable, and that it was clear the cause was not in the boiler itself, for, said he, more than usual caution was observed, inasmuch as that upon the stoppage of the engine on a Saturday night, the fire was extinguished by letting the water out upon it, through a plug-hole over the fire-place, and that no one had, subsequently, meddled with it till the following Monday, when it became necessary, for some purpose or other, to enter the boiler through the main hole. A man did so, another handing him a lighted candle, which was instantly followed by a terrific explosion, dealing destruction to everything around. The boiler was rent in pieces, and the unfortunate man literally blown to atoms. Here I differ entirely from the conclusion come to by Mr. Perkes. The caution to which he referred, doubtless, led to and caused the fatal occurrence which it was meant to prevent. By the decomposition of the water in contact with the coals, and, in short, from the coals themselves, hydrogen gas was rapidly evolved, and the boiler filled through the plug-hole served the purpose of a gasometer; but the gas might have remained there till Doom's-day, harmless and unperceived, but for the accidental introduction of the candle. * * * * I would seriously call the attention of the practical engineer to the adoption of some plan which should afford a ready method of ascertaining if the feed is at all times properly supplied to the boiler. I am aware that there is what is called the feed-cock for that purpose, but from inattention, or some other cause, it seems very inefficient. It is remarkable that most of such catastrophes happen either in the night, or on Sundays, when the engineers are not so much on the alert. This was the case at the recent calamity at Gannis Lake.

A very sure and undoubted remedy against these frightful calamities might be had in the use of copper boilers instead of iron, for copper has but little, if any, action on water, and attracts oxygen but slowly from the air; and I venture to affirm, that there is not on record of the bursting of

a boiler made of that material. There is one at a manufactory in Shoe-lane, Fleet-street, London, which has been in constant operation for the last ten years, without the slightest interruption of any kind, being still in excellent repair. But, notwithstanding the safety which would result from adopting them, the great expense, or first outlay, would, perhaps, present an insuperable objection, so far as our mines are concerned; but this should not at any rate be a consideration for a moment as to their being applied to manufactories, steam boats, and every sort of locomotive engines, for the greater durability of the material, and the value of the copper after the boiler should become useless, would, in the long run, render it the cheapest article of the two, to say nothing about the protection it would cast around the public.

In hope that these hints may attract the notice of scientific men,

I remain, Sir, your's, &c.,

Camborne, Nov. 13. A CORNISH MINER.

PROCEEDINGS OF PUBLIC COMPANIES.

NORTH-EASTERN RAILWAY COMPANY.

A special meeting of the proprietors of the above line was held at the London Tavern, on Thursday, the 2d inst.

W. CRAWSHAY, Esq., in the chair.

The formal business having been gone through, the CHAIRMAN read a resolution to the effect that the directors be empowered to raise by loan, at interest, the sum of 240,000*l.*, or so much as may be required.—A long conversation then ensued, during which it was explained that the total expense of the line would amount to 775,000*l.*, leaving a deficit of 15,000*l.* to be afterwards raised, and that the total number of shares was 9052. The question of the reduction of the fares was then considered at great length, during which it appeared that the late rise had not answered, but ultimately it was agreed that the matter should be left in the hands of the directors until the next general meeting.—The resolution was then put and carried unanimously, and thanks having been voted to the chairman and directors, the proprietors separated.

PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

The first annual meeting of the proprietors of this company was held at their offices, St. Mary Axe, on Tuesday, the 30th ult.

Sir G. G. DE H. LARPENT, Bart., in the chair.

From the report of the directors it appeared that the profits of the company for the first year amounted to 50,614*l.* 19s. 9d., out of which 13,262*l.* 19s. 5d. were paid for insuring the ships and floating property of the company, and the last dividend of 3*l.* 10s. per cent., leaving a surplus of 26,585*l.* 19s. on the 30th Sept., 1841. Out of this balance a dividend of 3½ per cent. for the half-year ending the 30th Sept., was recommended to be paid to the shareholders, which is at the rate of 7 per cent. per annum, and after the payment of 9376*l.* 7s. 8d. for keeping the vessels in repair, a surplus would still remain of 15,357*l.* 14s. 6d. The directors had insured the floating property of the company at 200,000*l.* There were 6492 shares of 50*l.* paid up, amounting to 304,600*l.*; 3241 shares have since been taken in England and Ireland, and 1315 in India—making 10,648 shares, and the amount paid thereon 357,340*l.* The East India Company, with a view of promoting a rapid and frequent communication between the presidencies and Ceylon, in addition to their grant of this company of 100,000*l.*, recommended an application to Her Majesty's Government that sufficient time should be allowed for the passengers from England to reach the steam-packet carrying the mails from Suez to Bombay, which has been agreed to, and now forms an essential feature in the comfort of passengers in their transit through Egypt. His Highness Mehemet Ali had afforded the greatest facilities to a transit through Egypt, and had also offered to render practicable, for carriage travelling, at his own cost, the routes between Suez and Cairo, and between Cosseir and Ghenneh, and to afford such escorts as might be necessary for protection. In conclusion, the directors congratulated the proprietors on the prosperous state of the company's affairs at so early a stage of its proceedings. The report having been adopted, several resolutions were passed unanimously, amongst which was one to his Highness Mehemet Ali, for efforts on his part, alike beneficial to the company, and tending to promote the general interests of commerce and civilisation, a copy of which to be conveyed to his Highness.—A vote of thanks having been passed to the directors, the meeting adjourned. It appeared that the company have four steamers for India by the Mediterranean, six for the Peninsula, one for the Ionian Isles, and two iron steamers for the River Nile, and others are contemplated.

MINING CORRESPONDENCE.

ENGLISH MINES.

HOLMBUSH MINING COMPANY.

Nov. 29.—I beg to inform you that the lode in the 110 fathom level west is eight inches wide, and worth 6*l.* per fathom. The lode in the 100 fathom level, west of Wall's shaft, is one foot wide, and worth 16*l.* per fathom. In the eastern stopes, in the back of this level, the lode is twenty inches wide, and worth 44*l.* per fathom; the lode in the western stopes, in back of ditto, is twenty inches wide, and worth 30*l.* per fathom. The lode in the ninety fathom level west is sixteen inches wide, and worth 14*l.* per fathom. In the eastern stopes, in the back of this level, the lode is fifteen inches wide, and worth 18*l.* per fathom; the lode in the western stopes, in the back of ditto, is eighteen inches wide, and worth 30*l.* per fathom. The lode in the eighty fathom level, east of Wall's shaft, is one foot wide, and interwixed with ore. In the winze, sinking below this level, the lode is still about eighteen inches wide, and worth 32*l.* per fathom; the lode in the stopes, in the back of ditto, is twenty inches wide, and worth about 34*l.* per fathom. The seventy fathom level, east of Wall's shaft, on the Flapjack lode, is without alteration. The stoping of Hitchins's shaft is going on with good progress. The tribute pitches are still looking favourable. We weighed on Friday last, Oct. ores 216 tons 6 cwt., and sampled Nov. ores, computed 213 tons of good quality.

F. PHILLIPS.

TRELEIGH CONSOLS MINING COMPANY.

Nov. 29.—The seventy fathom levels, east and west, are without alteration since my last report. The sixty west continues to be productive; the lode eighteen inches wide, and worth 15*l.* per fathom. In the fifty west the lode is two and a half feet wide, and worth 40*l.* to 50*l.* per fathom. The tributers, in the back of this level east, are working well, and have a good lode. In sinking the old sump shaft the lode for last fathom has been worth 15*l.*, it is now on a slide, which we shall sink through by the end of the week. At Good Fortune the lode in sinking is worth 10*l.* per fathom. The forty-four east is worth 6*l.* per fathom; and this level west is worth 8*l.* per fathom. The tributers generally are working well and getting wages in their respective tributes.

W. SIDCOCK.

TREGOLLAN MINING COMPANY.

Nov. 29.—I beg leave to inform you that the lode in the forty fathom level east is at present four feet wide, chiefly composed of peach and muadic, with a small portion of black and grey ore; this level is extended east from Baker's shaft about forty-six fathoms, twenty fathoms of which is productive ground, which we hope shortly to be able to set at a moderate tribute. The cross-cut extending north at this level is progressing in favourable ground, which we shall push with all speed, in order to intersect the northern lodes at as early a period as possible. The men in the thirty fathom level having been engaged nearly the whole of the past week in securing a run in ditto, I am unable to report anything new respecting the lode at this point. Our tribute pitches, on the whole, are looking favourable, and the men are working steadily.

J. NINNIS.

TRETOIL MINING COMPANY.

Nov. 29.—The lode in the forty fathom level, west of engine-shaft, is small and unproductive. The lode in the forty fathom level, east of engine-shaft, is fifteen inches wide, very good tribute ground. The lode in the thirty fathom level, east of Williams's shaft, is eighteen inches wide, good tribute ground. The rise in the back of this level is boiled; it has laid open very good tribute ground throughout. The rise in the back of the twenty fathom level, west of Johns's shaft, on Johns's lode, is boiled; it has laid open good tribute ground throughout. The part we are driving on of the Mine-park lode, east of Marcum's shaft, at the adit level, is eight feet wide, very good tribute ground for tin.

H. WILLIAMS. J. MORCOM.

WEST WHEAL JEWEL MINING ASSOCIATION.

Nov. 29.—The ground in Buckingham's engine-shaft continues favourable for sinking. In the fifty-seven east, on the south branch, the lode is one foot wide, with an increase of spar, and is now worth 5*l.* per fathom. The fifty-seven east, on Wheal Jewel lode, is eighteen inches wide, and worth 8*l.* per fathom. The stopes in the back of this level are worth 15*l.* per fathom. The lode in the back of the thirty fathom level, on Tolcarne tin lode, is worth 30*l.* per fathom.

S. LEAN.

UNITED HILLS MINING COMPANY.

Nov. 29.—Twenty Fathom Level—Lode three feet wide, disordered by a cross-cut. Thirty Fathom Level—Lode four feet wide, two feet ore of fair quality. Forty Fathom Level—In the eastern end of this level the lode is eighteen inches wide, producing but a little ore. In the stopes the lode is two feet wide, good ore. Forty-six Fathom Level, Eastern End—Lode three feet wide, producing some good stones of ore. Western End—Lode four feet wide, coarse in quality. James's Shaft—Lode two feet wide, poor at present. Fifty Fathom Level—In the eastern end the lode is 3 ft. 6 in. wide—1 ft. 6 in. good ore. In the western end the lode is four feet wide, very throughout. Diagonal Shaft—Lode two feet wide, producing a small quantity of ore. Sixty Fathom Level—The lode in the eastern end of this level is four feet wide—twenty inches of which is good ore, with a promising appearance. In the western end the lode is 2 ft. 6 in. wide, producing some good stones of ore. Williams's Shaft—No lode broken in this shaft since survey day.

S. H. PEARCE. N. LANGDON.

TINCROFT MINING COMPANY.

Nov. 20.—I beg to hand you my report of the state and prospects of this mine. The lode in the 152 east continues large and unproductive for tin—worth from 20*l.* to 30*l.* per fathom; the west end, same level, is yielding some tin, but not rich—will about pay for driving. The stopes in the back of this level, east of shaft, is worth 50*l.* per fathom. The pitches in back and bottom of the 142 are yielding fair quality tin stuff; men getting fair wages at their respective tributes. I cannot as yet speak of any improvement in the 142 end going ; the level in the eastern part of the mine continues to produce good work for tin, with some copper ore. Some of our pitches are also looking very well; from present appearances we are likely to continue to raise and return about the same quantity of tin as for some time past, and nearly the same quantity of copper ore. Since my last report we have had a very great improvement in the north mine, more particularly in the forty fathom level, east of new engine-shaft, where we have driven three and a half fathoms through a good course of copper ore—worth, on an average, 30*l.* per fathom; the west end, same level, will produce three tons of ore per fathom—worth about 4*l.* 10*s.* The shaft sinking under the forty fathom level is worth about 20*l.* per fathom, and appears to improve as we sink in this. The north part of the mine I consider very good. We continue to sink Palmer's shaft as fast as we can, but find the elvan course very hard to sink through.

W. PASCO.

REDMOOR CONSOLIDATED MINING COMPANY.

Nov. 27.—I beg to inform you that we held our monthly setting at these mines on Friday, 26th inst., particulars of which will be given you in another sheet. The ground at the sixty fathom level cross-cut has, within the last few days, become much harder than before, but suppose it to be nothing more than a floor, and therefore will be only of short duration; we have driven east of the shaft ten fathoms. In the north end, at the fifty fathom level, the lode is about five inches wide, yielding good work for silver-lead ore. The south end, at this level, is suspended for the present; the men are employed in raising a winze from the fifty to the forty fathom level, on the lead lode; it is six inches wide, saving work, and opening good tribute ground. The lode in the south end, at this level, is looking much more kindly than I have seen it for some time past, it is about six inches wide, producing good work for lead ores. Driving west, at the thirty fathom level, on the middle copper lode, the ground is favourable for driving; lode about twenty inches wide, retaining its usual character. At Huxtown, the lode in the eastern end is about ten inches wide, composed of capel, spar, and muadic; at the north end, driving on the cross-course, the ground is not so favourable for driving; we have cut a small branch or two, but cannot determine what it is. The ground in the end at Haye Valley is rather hard, and no appearance at present of any lode.

F. R. ROWE.

TAMAR SILVER-LEAD MINING COMPANY.

Nov. 29.—On Saturday last we held our monthly setting for December, and set sixteen pitches, and we have eight others, the men's time not expiring until the end of next month—making a total of twenty-four pitches, varying from 3*s.* to 19*s.* in the 1*l.*, on the value of the lead only—employing sixty four men on tribute. In the levels our prospects are as follow:—In the 125 fathom level the lode is eighteen inches wide, producing a small quantity of ore. In the 115 fathom level the lode is three feet wide, interspersed with ore throughout, but not rich. In the 105 fathom level the lode is in a disordered state, occasioned by the intersection of slide courses. In the ninety-five fathom level the lode is still unproductive. In the eighty five fathom level we are still passing through good tribute ground. In the seventy-five fathom level the lode is about one foot wide, producing saving work. In the sixty-five fathom level the lode is two feet wide, producing some promising work. In the forty-five end the lode is two feet wide, intermixed with good bunches of ore. In the thirty-five fathom level the lode is about the same width, and producing good work. On Monday last, the 22d inst., we sampled a parcel of silver-lead ores, computed fifty-five tons, which is for sale on Wednesday next, the 1st of December.

J. SPRAGUE.

FOREIGN MINES.

IMPERIAL BRAZILIAN MINING ASSOCIATION.

Gold Report.—From the 3d of September to the 22d (seventeen days) 48 lbs. 0 oz. 10 dwts. 3 grs.—Total from the 1st of July to the 22d of September, 255 lbs. 6 oz. 6 dwts. 15 grs.

MINING NOTICES.

[Under this head we purpose collecting such paragraphs as may appear in the provincial and other Journals, having reference to discoveries and improvements in mining operations at home and abroad. It is hardly necessary to observe, that we must not be considered to admit the correctness of the information conveyed, which, in too many instances, requires cautious investigation—the sanguine expectations of parties in some instances, and the want of honesty in others, throwing a degree of responsibility on a Journal in giving publicity to reports, which we do not intend taking upon ourselves.]

MINING IN NEW BRUNSWICK.—*(From a correspondent.)*—The agent of the Gloucester Mining Association (Mr. Stephens), in exploring for copper ore on the Zeta-a-Gouch River, in the county of Gloucester, discovered a number of small veins of a beautifully crystallised mineral; these veins, by being followed a short distance, promise well. Machinery has been erected, and the river, by affording sufficient power to perform the labour of the mine, has been turned upon a large water-wheel for that purpose. The ore, when first discovered, was examined by a Dr. Robb, of Fredericton, and pronounced by him to be antimony; it, however, proves to be the grey oxide of manganese, and fifty tons have been shipped for England. The mine is favourably situated, and the ore is of an excellent quality.

MINE ACCIDENTS.

The Explosion in Belgium.—In our last we gave the particulars of a dreadful explosion of fire-damp in the coal mines of M. Felix (Hainault); we have since learnt that all the bodies of the unfortunate sufferers (twenty-eight in number) who perished by the catastrophe have been got out, with the exception of two.

Buffery Colliery.—On Friday last, a man of the name of John Cock was banking at a pit in the old Buffery Colliery, near Dudley, and by accident fell in; he was literally smashed to pieces, and his mutilated body was compelled to be carried home in a bag.

Gib-Field Colliery.—A melancholy accident occurred at this colliery, situated in Atherton, belonging to J. Fletcher, Esq. Two boys had been left to finish some work after the men had gone; when they were about to leave, finding the engine out of gear, they ascended the ladder, and when of them was within a few yards from the top he lost his hold, and fell about thirty yards, so severely fracturing his head that he only survived the accident a few hours.

Cyfarthfa.—Three colliers were dreadfully burned by an explosion in one of the levels on Tuesday week; the men, it appears, were at work without the Davy lamp, to which may be attributed their loss of life.—Another life was sacrificed in one of the levels on the following day, but how, or by what means, we have not heard. It seems he was working by himself, and was found dead when his fellow-workmen went to him.

Ritca.—T. Morgan lost his life in a quarry where he was employed; a stone so ponderous as to require seven horses to remove it from over the wretched man's remains fell on him, and literally crushed him.

Brierley Hill.—An accident occurred at the colliery of Mr. Bond, Buckpool, from an explosion of inflammable air, by which two men were so seriously injured that they are not expected to recover.

Clay Cross Colliery.—Mr. White, while employed in assisting the loaded coal waggons down an inclined plane at this colliery, had his arm severely injured by being caught between the "bumpers" of two waggons.—A man named Fox was about descending one of the pits for the purpose of resuming his work, when, being a stranger to the place, he unfortunately walked over the side, and fell to the bottom of the shaft, a depth of about thirty-five yards, by which he was sadly mutilated. He bore the amputation of one leg, but then began to sink, and the medical men being unable to perform further operations which were deemed advisable, he, after experiencing the most dreadful suffering for about three hours, breathed his last.

Mawbay Colliery.—A lad, named Hudson, was killed in a pit belonging to Mr. S. Woolley, at Mawbay, through some "bind" falling upon him.

Priestfields Colliery, Bilston.—D. Hambrook fell down a coal-pit shaft at this colliery, and was literally smashed.

THE SAFETY LAMP.—At the general meeting of the Manchester Geological Society, on Wednesday week, Mr. Looney, in the course of an introductory lecture, explained that his attention had been called to this topic [the utility of the safety lamp] by finding, from considerable intercourse with colliers, that the most deplorable ignorance prevailed among them as to the use of the safety lamp; he was persuaded that most of the dreadful accidents which occurred so frequently in coal-pits, were owing to the ignorance of the colliers on this head, and he thought a few simple lectures on the properties of hydrogen and oxygen, the nature of the safety lamp, and the necessity which existed for always having their lamps in good order, might be of much use in preventing those accidents. A desultory conversation followed, in the course of which Mr. Looney stated, that he intended to commence a course of lectures on Friday or Monday week; the first would be delivered at Flowery-field, the next at Duke-shield, then Oldham, and Ashton-road, Ringley, Clifton, and Worsley.

A Geological Museum is about to be formed at Lyme, under the auspices of the Rev. W. D. Conybeare.

REVENEY IRON COMPANY.—We regret to learn that all business at the extensive works of this company have been completely stopped, in consequence of a general "strike" among the workmen; the greatest alarm exists in Rhymney, Merthyr, and the neighbourhood, as it is feared, from the sullen and reserved manner assumed by the deluded workmen, that they intend extending their mischievous conduct, by inducing a like step to be taken by those employed at the other works in these densely-populated iron districts.

IRON TRADE IN SCOTLAND.—We understand that the iron masters of Scotland have resolved to blow out, for six months, one-fourth of their furnaces; this is said to be a resolution of dire necessity on the part of the masters, and will, of course, be felt with great severity by the numerous body of operatives in connection with this branch of industry in the west of Scotland.

MINING IN LITTLETON.—Mining affairs are represented to us as being in a very depressed state in the neighbourhood of Littleton, with but an indifferent demand existing for the produce, although there has lately been made a great reduction in price. "For what round coal we have (adds our correspondent) the price is not so very low, but the proportion of round to slack is so very little, that the average price is considerably beneath what it ought to be, particularly when it is considered that the seam is poor and heavily watered."

CONDITION OF THE MINING POPULATION.—Dr. Barham (of Truro) has been delivering lectures at the Polytechnic Hall, Falmouth, "On the Condition of the Mining Population of the West of England." Dr. Barham, having been engaged for some time past as one of the commission appointed by Government to inquire into the employment of children, has had abundant opportunity of gathering a great mass of information together; from these stores of facts, which he has so industriously collected, Dr. Barham arranged a lecture of the most interesting kind. We hope shortly to be able to furnish our readers with much of the historical information contained in the lecture, which was really valuable to those engaged in mining operations, and of importance in directing the efforts of humanity.

VEGETABLE ORIGIN OF COAL.—Mr. W. King read a paper at a recent meeting of the Natural History Society of Northumberland, Durham, and Newcastle-upon-Tyne, "On the Vegetable Origin of Coal," as founded, historically, on the regular mineralogical gradation existing between recent lignite and anthracite, or stone coal; secondly, on the consecutive chemical changes traceable between newly dead vegetable matter and anthracite, through the evolution, in varying proportions, of its constituents; and, thirdly, on the constant presence of vegetable remains in deposits associated with coal beds. We shall endeavour to procure a copy of Mr. King's paper, which we shall take the earliest opportunity of submitting to our readers.

FROM THE LONDON GAZETTE,

Tuesday, November 30.

INSOLVENTS.

Nov. 29.—Charles Dod, Riches court, Lime street, shipbroker.

30.—Robert Bacon and Robert Wayman, Barbican, wire workers.

Henry Carew Hunt, Hamburgh, and Old Broad-street, merchant.

BANKRUPTS.

W. Blatch and W. Lampert, Grove-place, Brompton, printers. [Boulton, Northampton-square.

T. Giles, St. John's-lane, Clerkenwell, wire worker. [Crosby and Co., Old Jewry.

J. Buckle, Terrace, Kensington, tea dealer. [Hill and Co., New London street.

E. Adams, Blenheim-street, New Bond-street, livery stable keeper. [Yates and Turner, Duke-street, Westminster. [Cheapside.

D. Oliver and W. Goodwin, High Wycombe, Buckinghamshire, drapers. Ashurst, J. Marshall, Birchin-lane, merchant. [Willis, Bower, and Willis, Tokenhouse-yd.

T. Pilbeam, Parker street, Drury-lane, smith. [Mayhew, Johnson, and Mayhew, Carey street, Lincoln's Inn-fields.

R. H. Goddard, Wood street, fringe maker. [Richards and Co., Lincoln's Inn-fields.

E. M. Morgan, Welshpool, Montgomeryshire, barytes manufacturer. [Milne, Patty, Milne, and Morris, Temple.

R. Gwilden, Welshpool Montgomeryshire, carrier. [Milne and Co., Temple.

S. Algar, Reading, Berkshire, common brewer. [Hill, Throgmorton-street.

T. Waterman, Leeds, dyer. [Few, and Co., Houlgate street, Covent garden.

R. Pritchard, Bangor, Carnarvonshire, druggist. [Abbott and Co., New-inn.

J. Smethurst, Manchester, small ware manufacturer. [Walmesley, Knightlor, and Parkin, Chancery-lane. [Furnival's Inn.

H. Carey, Nottingham, and G. B. Carey, Basford, hat manufacturers. [Vallop, J. H. Lonsdale, Manchester, wine merchant. [Johnson and Co., Temple.

A. Cook, Manchester, commission agent. [Adlington and Co., Bedford-row.

R. C. Walker, Chesterfield, earthenware manufacturer. [Spence and Bedford, Alfred-place, Bedford square.

J. Unsworth, Liverpool, joiner. [Holme, Loftus, and Young, New Inn.

B. Bartill, Liverpool, merchant. [Holme and Co., New Inn.

W. Burton, Nuneaton and Chilvers Coton, Warwickshire, tanner. [Bellye, Fisher, and Sudlow, Chancery-lane. [street, Bloomsbury-square.

W. Miles and J. Dawkins, Southampton boot makers. [Walker, Southampton-

DIVIDENDS

Dec. 20, J. and G. F. Squiren, Exmouth-street, Poplar, plumbers—23, S. Hopkins, Croydon, grocer—23, S. Barlow and R. S. Mulley, Little Bartholomew-close, Wood Smithfield, stone masons—23, C. Daly, Red Lion-square, bookseller—21, F. Tracy, Tooley-street, Southwark, slop seller—23, R. Brett, Gedling, Nottinghamshire, corn factor—21, E. and J. Kirby and J. and W. K. Gregory, Sheffield, silver platers—23, J. G. Caporn, Bedford, draper—23, E. Corpe, Birmingham, scrivener.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or before Dec. 21.

A. Wood, Basinghall-street, Blackwell-hall factor—P. M'Aslin, Liverpool, commission merchant—W. H. Taylor, Norwich, apothecary—J. Morris, Birmingham, victualler—O. Slaite, Wood street, Cheapside, lace warehouseman—M. Wardall, Carey-street, Lincoln's Inn, lodging-house keeper—T. Crowther, Liverpool, wine merchant—C. Lawton, Liverpool, shoemaker.

Friday, December 3.

INSOLVENT.

Dec. 1.—William Willmoke, Bracknell, Berkshire, saddler.

BANKRUPTCIES SUPERSEDED.

John Saunders, Plymouth, grocer merchant.

Samuel Mell, Sun Tavern fields, St. George's-in-the-East, victualler.

BANKRUPTS.

M. Banks, Hatton garden, carpet warehouseman. [Grimaldi and Co., Copthall-court, Throgmorton-street.

G. Winder, Hackney-road, jeweller. [Williams, Alfred-place, Bedford square.

J. G. Bowley, Hatton-garden, bookbinder. [Appleby, Aldermanbury.

A. Lawrie and J. Lind, Wood street, City, importers of foreign goods. [Ashurst, Cheapside. [New Bridge street, Blackfriars.

R. J. Mabbin, Bradford-street, Manchester-square, grocer. [Sutcliffe and Birch, C. Schofield, Kingston-upon-Thames, timber merchant. [Lightley, Pooles-square.

J. Palmer, Upper Wellington street, carpenter. [Rixon and Son, Jewry-st., Aldgate.

R. B. Parlour, Alfred-street, Stepney, victualler. [Ware, Blackman street.

J. Simpson, Gresswell-street, carrier. [Nias, Copthall-court, Throgmorton street.

R. Price, New Windsor, victualler. [Gale, Basinghall street.

S. Birtwisle, Northwich, Cheshire, flour dealer. [Johnson and Co., Temple.

J. Siddons, J. M. Wathen, and J. Siddons, jun., Nuneaton, Warwickshire, coal-masters. [Beck, Ironmongers' hall, Fenchurch-street. [Selby.

T. Richerton, Newtown, Montgomeryshire, linendraper. [Baxter, Lincoln's Inn.

J. Wright, Birmingham, matchet manufacturer. [Holme and Co., New Inn.

R. Gunton, Kingston-upon-Hull, sawyer. [Hawkins and Co., New Boswell-court.

J. Rose, Stourbridge, Worcestershire, woollen draper. [Walker, Furnival's Inn.

W. Ridge, C. Ridge, and W. Newland, Chichester, bankers. [Scotland and Long Somerset-street, Fleet street.

T. W. Brighton, Chelmsham, general agent. [Burke and Co., Lincoln's Inn-fields.

W. Parker, Hockley, Nottinghamshire, grocer. [Johnson and Co., Temple.

S. Evans, Road, Somersetshire, clothier. [Pennington, South square, Gray's Inn.

I. Jones, Worcester, victualler. [Burke and Flower, Lincoln's Inn-fields.

J. F. Yapp, Wembley, Herefordshire, grocer. [Smith, Chancery lane.

DIVIDENDS.

Dec. 24, J. Calvert, Pall-mall, ivory turner—27, G. Wegg, Ipswich, draper—J. Magnus, Bamagate, linendraper—T. Parr, Manchester, silk manufacturer—Jas. & J. Wild, sen., Sheffield, ivory dealer—Dec. 22, C. Allison and T. Mitchell, Neville Shields, Sunderland—27, H. Richelieu, Canterbury, coal merchant—27, J. Foljey, Twickenham, draper—W. Williams, Bridge, Kent, brewer—G. Lepage, London, dealer and chapman—24, J. Hay ward, Manchester, bookseller—S. Parrott, Leicester, brewer—J. Shaw, Saddleworth, Yorkshire, woollen manufacturer.

CERTIFICATES to be granted, unless cause be shown to the contrary, on or before Dec. 24.

S. Hancock, Liverpool, Gosport victualler—R. Dow, King-street, Holborn, furniture dealer—J. W. Wainwright, Bridgewater, Somersetshire, builder—C. Cannon, Dashwood-house, Lower Thames street, fish factor—P. Mackennal, Truro, Cornwall, common brewer—T. Smithson and H. Middleton, City-road, mahogany merchants—W. H. Taylor, Norwich, apothecary.

METEOROLOGICAL JOURNAL, 1841.

Nov.	Thermometer	Barometer	Wind	Rain
Thursd. 25	from 39 to 50	29.79 to 29.91	Monday 29	from 42 to 50	29.54 to 29.59
Friday 26	..... 37 .. 49	29.79 .. 29.71	Tuesday 30	..... 51 .. 53	29.64 .. 29.15
Saturd. 27	..... 36 .. 50	29.64 .. 29.56	Wednes. 1	..... 45 .. 49	29.30 .. 29.34
Sunday 28	..... 40 .. 46	29.57 .. 29.46			

Wind S W. on the 25th, N. E. on the 26th, S. E. on the 27th, east S. and S. W. on the 28th, east; On the 29th, a thick fog in the morning, otherwise overcast, a little rain in the evening; the 27th, misty and foggy, rain fell in the evening; the 26th, evening cloudy, with rain, otherwise generally clear; the 28th, overcast, with frequent and heavy showers of rain, wind very boisterous during the day; the 29th, all, evening clear, otherwise overcast, frequent showers of rain during the morning; the 1st inst., a general overcast, rain in the afternoon and evening.—The heavy rain on the evening of the 30th, and following morning, caused the waters to be raised several feet above their usual level.

Ross Manse, 4 p.m. and 10 p.m. on 30th.

CHARLES HOWE ROSS.

MONEY MARKET AND CITY NEWS.

CURRENT PRICES OF ENGLISH AND FOREIGN FUNDS.

Consols Account, 89⅞ ¼	Dutch, 2½ per Cent., 52 ⅛
Reduced 3 per Cents., 89⅞ ¼	Ditto, 5 per Cent., 99 ¼
Reduced 3½ per Cents., 97⅞ 8	Portuguese, 5 per Cent., 32¼ 4
Long Annuities, 12⅜	Ditto, 3 per Cent., 20¼ ⅜
Bank Stock, 164 5	Russian, 5 per Cent., 113 14
Exchequer Bills, 10 12 pm.	Spanish, Actives, 5 per Cent., 23¾ 4
Belgian Bonds, 5 per Cent., 100¼ ⅞	Chili, 6 per Cent., 71 3
Brazil, 5 per Cent., 57½ 8½	Colombian, 6 per Cent., 20¼ ⅞
Danish, 3 per Cent., 78 9	Mexican, 5 per Cent., 25¼ ⅞

REMARKS ON THE OPERATIONS OF THE WEEK.

SATURDAY, Nov. 27.—The English stocks were flat; some sales, to the amount of 5,000l., made by the Bank broker, slightly influenced prices, which had previously exhibited a tendency to decline, but in other respects the market was without alteration.—There was an attempt made in the foreign house to move Spanish, by raising a report of an apprehended scarcity of stock for the settlement, which met for a time with trifling success; few dealings of importance occurred in other stock, but the market generally may be said to have closed with a firmer appearance.—Railway shares were scarcely dealt in, and prices remained without alteration.—Australasia Bank, 57; National of Ireland, 16¼ to ½; Provincial of Ireland, 40¾; and Union of Australia, 30.

The failure of Messrs. Hector and Co., bankers, of Petersfield, was announced in the city; the concern is but a small one, and the liabilities are not supposed to exceed 20,000l.

MONDAY.—The national securities did not maintain the quotations of Saturday, Consols for the Account having closed at 89⅝ to ⅞, and 89⅞ to 9 for money; a further sale of 50,000l. was made by the Bank broker, but produced no palpable impression on the market.—There was great activity in the market for the Peninsular securities, especially in Spanish bonds (the prices in Madrid having advanced rapidly), and a considerable amount of business was transacted, at an improvement of about ⅜ per cent.; in other securities there was but little done.—Business in the share market continues on a very limited scale, without any change of the least importance to notice.—Real del Monte Mining Company (unregistered), 2.—Colonial Bank, 27.

Letters from Arundel mention that the banking-house of Messrs. Hopkins, Druid, and Co., had been compelled to suspend their payments; this bank was on a small scale, and the whole circulation is not supposed to have exceeded 7000l. or 8000l.

TUESDAY.—Some heavy sales of money stock, made by Government and other brokers during the day, rendered the aspect of the English funds dull, but there was no material decline in prices. Consols for Money closed 88⅞ to 9, and for the Account 89⅛ to ¼; Exchequer Bills, 8s. to 10s. pm.; India Stock, 247½ to 8½; Bank Stock, 163¾ to 4¼.—This was settling-day in the foreign house, which passed off well; money was in demand at from 6 to 8 per cent., and this caused a slight fluctuation in Spanish, but its price, however, left off steady at 23⅝ to ¾; Portuguese continues without alteration, but Dutch is rather lower; Mexican, 25¼ to 6; Brazilian, 58 to 9.—The share market continues much depressed, and the range of quotations for the limited business done may be taken at a decline; Great Westerns, South Westerns, and South-Easterns, were each done at lower prices; while the unfortunate Brighton, having experienced another "slip," owing, perhaps, to the late unfavourable weather, was quite out of favour.—Union Bank of London, 9½.

The house of Balguerie and Co., of Bordeaux, a firm of large transactions and extensive connections, has been obliged to suspend payment, but it is expected that they may yet be able to make arrangements to resume business. The house of Monge and Niemann, of Hamburgh, has also stopped, but their engagements are of less importance.

The foreign exchanges were not very brisk, but the rates upon Hamburgh and Paris were quoted rather lower. Amsterdam short, is rated 12 3 to ¼; ditto, three months, 12 4¾ to 5; Hamburgh, 13 10¼; Marseilles, 25 77½; Antwerp, 12 5⅞; and Rotterdam, 12 5.

The premium on gold at Paris is 5 per mille, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 25. 27, and the exchange at Paris on London at short being 25. 45, it follows that gold is 0·72 per cent. dearer in London than in Paris.

By advices from Hamburgh the price of gold is 428 per mark, which, at the English Mint price of 3l. 17s. 10½d. per ounce for standard gold, gives an exchange of 13. 6¼, and the exchange at Hamburgh on London at short being 13. 7⅞, it follows that gold is 0·88 per cent. dearer in London than in Hamburgh.

The course of exchange at New York on London is 110 per cent., and the par of exchange between England and America being 109 23-40 per cent., it follows that the exchange is 0·43 per cent. in favour of England. But the quoted exchange at New York being for bills at sixty days' sight, the interest must be added to the above difference.

The last proof of debts against the estate of Messrs. Halford and Co. (the Canterbury Bank) amounted to 15,000l.—making, with about 70,000l. proved on the former occasion, a total of 85,000l.

The total debts proved to this time against the estate of Messrs. Hobhouse and Co., of Bath, amount to 121,250l. The assignees appear to have shown great activity in getting in the outstanding assets, and at one of the above meetings they applied to the Commissioners, and obtained authority for investing in Exchequer Bills the sum of 5,000l.—making, with 10,000l. before invested, the sum of 25,000l. thus disposed of for the purpose of a dividend.

WEDNESDAY.—There was a good deal of business transacted in the English funds to-day, and fluctuations to the extent of ⅜ per cent. took place, the price of Consols for Money at one period being quoted as low as 88⅝, but it eventually recovered to 89, which was the final quotation. The cause of this action and counteraction upon the market was the continuance of sales by the Government broker, to make up the necessary supplement to the late funding, and so strong did these bear upon it at the time they were made that money fetched 6 per cent.; the temporary effect of this was soon effaced, for before the close of business there were borrowers of stock. Consols for the Account left off at 89⅛ to ¼; Exchequer Bills, 8s. to 10s. pm.; Bank Stock, 164 to 5; India Stock, 247½ to 8½; and India Bonds, par to 2 pm.—Notwithstanding prices of Spanish stock were represented as further advancing at Madrid, a reaction took place in our market of ¼ per cent., the Active stock being last quoted 24⅛ to ⅜; Portuguese remain firm at a slight improvement; the other foreign stocks are also firm, though but few bargains took place.—The railway share market presents no change in price of the least importance.—Cobre Copper Mining Company, 38¼; Rhymney Iron Company, 8 to 9.—London and Westminster Bank, 21⅛.

THURSDAY.—Business was again extensive in the public funds, but, notwithstanding large sales on the part of Government, no material impression was made on prices. Money was easy, which of course was an essential support to the market, and the manner in which it flowed in gave rise to the belief that the Bank broker was advancing on stock. The transfer books were closed to-day for Consols, prior to the payment of the January dividends.—There was some fluctuation in Spanish stock, the Active Bonds receding at one period to 23⅞ to ¼, but afterwards recovered to 23⅞ to 4, owing to some speculative purchases; the movement, however, is attributable to some small buyers having entered at a low figure, endeavouring to realise, and to the absence of any steady demand for purchase.—The railway share market continues in the same passive state.—Cobre Copper Mining Company, 33½ to 5; Real del Monte, unregistered, 1½.—Australasia Bank, 53 to 2½; Union of Australia, 3⅛; Danube and Maine, 30.

FRIDAY.—The public securities show every disposition to be steady, at an improvement in price, for, notwithstanding some sales made during the day, they closed higher than they opened. Quotations are now made ex div., and Consols for the Account, therefore, bear the price of 88⅞ to ¼; Bank Stock, 164½ to 163¾; India Stock, 243 to 5, ex div.; Exchequer Bills, 9s. to 11s. pm.; and India Bonds, par to 1 pm. A slight improvement also took place in the value of the unfunded debt, which was the result of purchases, and of the very easy condition of money at the Stock Exchange. Out of doors, however, there appears to be an increasing demand for it to meet the engagements falling due to-morrow and on Monday.—The foreign securities closed almost without an alteration on yesterday's quotations; transactions throughout the day were chiefly confined to Spanish stock, which fluctuated much, but ultimately closed at 23⅞ to 24; Mexican, 25½ to ⅞; Colombian, 20¼ to ⅞.—Some trifling business was done in the share market, but the prices were rather under the last mark, with the exception of Birminghams, which made a slight advance.—Australasia Bank, 52 to 2; Colonial, 27; Provincial of Ireland, 40.

There was very little business in bills to-day on 'Change. Hamburgh, 13 10 to 10¼, three months' date; Paris, 25 67½ to 72½; short, 25 32½ to 47½; Frankfort, 140⅞ to 20¼; Vienna, 9 48 to 50; Trieste, 9 51 to 53; Lisbon, 51⅞ to 2; Oporto, 52⅜ to ⅞.

A second dividend was declared in the matter of Mr. Timothy Abraham Curtis this morning; the bankrupt, it will be recollected, filled the chair of the Bank of England, and was for a long period one of the directors of that establishment; he was also chairman of the Imperial Brazilian Mining Association, and several other public companies. The dividend is expected to amount to between 6d. and 7d., and will, with the former dividend declared (7s. 2d.), make a total dividend of 7s. 8d. and a fraction announced payable by this estate.

It is just reported that a slip of earth has occurred on the Gosport Branch Railway, which detained the trains, and in consequence of the wetness of the season, and the treacherous nature of the soil, the directors have resolved to discontinue the running of the trains from Gosport to Bishopstoke for the present.

PROMISSORY NOTES AND BULLION.—An account of the average aggregate amount of promissory notes, payable to bearer on demand, which have been in circulation in the United Kingdom, distinguishing those circulated by the Bank of England, by private banks, and by joint-stock banks, in England and Wales, by the banks in Scotland, by the Bank of Ireland, and by all other banks in Ireland; and of the average amount of bullion in the Bank of England, during the four weeks preceding the 13th day of November, 1841:—England: Bank of England, 17,083,000l.; private banks, 6,79[illegible]; joint-stock banks, 3,471,186.—Scotland: Private and joint stock banks, 3,[illegible].—Ireland: Bank of Ireland, 3,358,[illegible]; private and joint-stock banks, 2,611,3[illegible].—Total, 36,102,[illegible]. Bullion in the Bank of England, 4,[illegible]. HENRY L. WICKHAM.

Stamps and Taxes, Nov. 29.

BANK OF ENGLAND.—TRANSFER BOOKS.

	SHUT.		OPEN.	
3 per Cent. Consols	Thursday, Dec.	2, 1841.	Friday, Jan.	14, 1842.
New 3½ per Cent.	Friday	3	Friday	14
3 per Cent., 1726	Thursday	9	Tuesday	11
New 5 per Cent.	Friday	10	Tuesday	11
Ann. for terms of years	Monday	6	Friday	21
South Sea Stock	Monday	6	Wednesday	12
Ditto New Annuities	Tuesday	7	Thursday	13
3 per Cent., 1751	Tuesday	7	Thursday	13
India Stock	Thursday	2	Tuesday	18

GENERAL BANKRUPTCY IN EUROPE AND AMERICA.—The principal State Governments of this republic, south and north, are in debt for 200,000,000 dollars, and all but two or three will be unable to pay the interest, and thus will become bankrupt in two years. In South America every Government is in debt—probably the aggregate is equal to 100,000,000 dollars—not a cent. of which will ever be paid. In Europe all the Governments, Christian and Turk, are in debt to the amount of 5,000,000,000 dollars or more; these debts are increasing, and will lay the foundation of revolutions. The only Government in the world out of debt (we count the late loan temporary only) is the Federal Government of the United States, and this was done by the obstinacy of old Jackson. The Chinese Government may be out of debt, but we don't know, certainly.—*New York Herald.*

[From our own correspondents.]

LATEST PRICES OF IRISH STOCKS.—3 per Cent. Consols, 88—3½ Stock, 97⅛—Ditto New, 1840, 97⅞—3½ per Cent. Debentures, 96¾—Bank Stock, 170—Kingstown Railway, 77½—Drogheda, 10—National Insurance Company, 27—City of Dublin Steam Company, 114½—ditto Stock, 1898, 56—British and Irish Steam Company, 57—Hibernian Bank, 2⅞—Royal Bank, 10—Mining Company of Ireland, 14⅛—Wicklow Copper Mines, 14¾.

EDINBURGH, Wednesday.—Edinburgh and Glasgow Railway, 43l.; Dalkeith and Edinburgh, 30l.; Glasgow and Greenock, 23l.; Glasgow and Garnkirk, 38½l.; Glasgow and Ayrshire, 36l.; Wishaw and Coltness, 40l.; Dundee and Arbroath, 20l.; Arbroath and Forfar, 22l.

Monthly Report.—November.—The commencement of this month presented some indications of general improvement, and towards the Term we had a good deal doing, with in some instances an advance in price. During the last two weeks, however, money has been as tight as at any previous period of the year, and there has been little disposition to make purchases of any description. Bank of Scotland has been sold at 155l., Royal at 151½l., and British Linen at 211l. Edinburgh and Leith Bank took a sudden start from 5½l. to 6l., at which price it is now offered; Western advanced from 69l. to 71l.; Glasgow Union to 86l.; and Greenock Union to 5l. In other bank shares no alteration for the better has occurred. The near approach of the Scottish Union Insurance Company's meeting, at which the periodical investigation of its life business is expected to have a favourable effect, has caused some inquiry for that stock, and several large lots have changed hands at 2s.; North British, Hercules, Caledonian, Edinburgh Life, City of Glasgow Life, and Life Association, are all wanted at the quotations; while Glasgow Fire, in contemplation of the company's affairs being shortly wound up, has found purchasers at about 12s. Further demands for funds by the Edinburgh and Glasgow Railway have tended to depress its shares, which, during the month, have been sold at 45l., 44¾l., 44¼l., 43¾l., and 43l. Ayrshire Railway has fallen farther, from 11l. to 14l. dis., Greenock from 1l. to 2l. dis., and Dundee and Arbroath may be had at 1l. dis., Garnkirk is a little better, and Newhaven is inquired for at 17l. dis. Considerable purchases have recently been made on Scotch account in some of the leading English lines, particularly in South Western, Midland Counties, and York and North Midland. Both the gas companies' stocks are in demand at the quotations, also Union Canal, and Shotts Iron Company. The Northern Reversion having increased the holdings of its proprietors one-sixth, by giving off stock formerly purchased by the company, the price for the existing shares, carrying right to the proportion which will in this way be added to them in January, has advanced from 73l. to 77l.

BRISTOL, Friday.—We have had more business doing since my last, and our market continues firm at my quotations.—Great Western Railway, 79½l. to 80½l.; halves, 57½l. to 57¾l.; fifths, 8½l. to 8¾l.; Bristol and Exeter, 27l. to 28l.; Bristol and Gloucester, 5l.; Cheltenham Union, 6l. to 8l.; Birmingham and Gloucester, 55l. to 57l.; Taff Vale, 68l. to 70l.—Bristol Gas Company, 33l.; Clifton Gas, 25l.

HULL, Thursday.—A quiet market, with little doing.—Birmingham and Derby Railway, 50l. to 52l.; Birmingham and Gloucester, 56l. to 58l.; Grand Junction, 19[illegible]l.; Great North of England, 66l. to 67l.; Great Western, 80l. to 81l.; Hull and Selby, 38l.; Leeds and Selby, 28l.; Liverpool and Manchester, 198l.; London and Birmingham, 156½l.; Manchester and Leeds, 56l. to 58l.; Sheffield and Rotherham, 32l.; York and North Midland, 85l. to 88l.—Yorkshire District Bank, 9l.; Sunderland Joint-Stock, 5½l.—Hull Flax and Cotton Mills, 100l.

BIRMINGHAM, Thursday.—London and Birmingham Railway, 68l. to 68l. pm.; Great Western, 14l. to 15l. pm.; London and South-Western, 55l. to 56l. per share; London and Brighton, 35½l. to 35½l. per share; Birmingham and Gloucester, 44l. dis.—Birmingham Banking Company, 19½l. to 19¾l. per share.

NEWCASTLE.—North of England Joint-Stock Bank, 5l. 5s.; Northumberland and Durham District, 8½l.; Newcastle, Shields, &c., Union, 8¾l.; Newcastle-upon-Tyne Joint-Stock, 24l.; Sunderland Joint-Stock, 6l.; Stockton and Durham County, 6½l.—Newcastle and Carlisle Railway, 94l.; Newcastle and North Shields Railway, 45l.; Brandling Junction, 4sl.; Great North of England, 65l.; Hartlepool Dock and Railway, 180l.; Stockton and Hartlepool, 44l.; Clarence, —l.—London, Newcastle, and South Shields Shipping Company, 5l.; Port of Newcastle, 21l.; Gateshead and Tyne, 20l.; Newcastle Union, 4½l.—Newcastle Marine Insurance Company, 4½l.; Newcastle Commercial, 1l. 3s.—Durham County Coal Company, 9½l.; Northern Coal Mining, 4l.

SALE OF COPPER ORES IN CORNWALL.

Sampled Nov. 17, and sold at Andrew's Hotel, Redruth, Dec. 2.

Mines.	Tons.	Price.	Purchasers.	Mines.	Tons.	Price.	Purchasers.
East Crofty	100	£6 13 6	Williams.	Dolcoath	50	£5 19 6	Vivians.
ditto	90	2 9 0	—	Fowey C.	58½	4 15 6	—
ditto	78	5 16 0	—	ditto	58½	4 15 6	Nevill & Co.
ditto	31½	4 7 6	Vivians.	ditto	100	5 11 0	Freemans.
ditto	31½	4 7 6	Williams.	S. Basset	67	4 17 0	Williams.
ditto	60	4 5 6	Vivians.	ditto	51	5 13 6	Freemans.
ditto	56	3 19 6	Williams.	ditto	38	10 10 0	—
ditto	48	2 0 0	Vivians.	ditto	25	6 1 0	—
ditto	30	1 16 0	Williams.	Camb'rne Vean	91	6 11 6	—
Longclose	67	8 9 6	Vivians.	Stray Park	28	5 16 0	—
ditto	59	7 1 0	Williams.	ditto	28	5 16 0	Williams.
ditto	50	10 11 6	Mines Royal	ditto	33	2 19 6	Freemans.
Dudnance	26	8 13 6	—	W. Harriet	59	4 7 6	Vivians.
East Pool	37½	7 4 6	Vivians.	ditto	43	7 1 0	Freemans.
ditto	37½	7 4 6	Freemans.	ditto	13½	8 11 0	Vivians.
ditto	60	9 15 0	Nevill & Co.	ditto	13½	8 14 0	Freemans.
ditto	56	7 10 0	—	ditto	13½	8 14 0	Nevill & Co.
ditto	56	7 6 0	—	ditto	36	2 19 6	Williams.
ditto	36	7 16 0	Williams.	Tretoil	86	4 17 0	Vivians.
ditto	28	8 1 0	Nevill & Co.	ditto	65	3 16 0	—
United H.	96	4 2 6	Vivians.	ditto	14	9 0 0	—
ditto	67	4 7 0	Mines Royal	Wh. Kitty	76	4 5 6	Nevill & Co.
ditto	50	9 15 6	Freemans.	ditto	50	3 18 6	Williams.
ditto	39	4 8 6	Mines Royal	ditto	16	0 10 0	Vivians.
ditto	21	5 7 6	—	West Jewel	51	8 0 0	Freemans.
ditto	18	13 2 6	—	ditto	44	6 3 0	—
Dolcoath	66	8 6 6	Vivians.	W. Clifford	40	5 16 6	Williams.
ditto	62	6 7 0	—	W. Sparrow	13	5 12 6	—
ditto	60	5 5 6	—				
ditto	50	2 5 0	—				

TOTAL PRODUCE.

East Wh. Crofty, Longclose, Dudnance	721	£3935 3 0	Camborne, Vean, Stray Park	180	£1021 6 0
East Pool	315	2496 5 6	Wh. Harriet	180	1030 9 6
United Hills	310	1780 13 6	Tretoil	165	790 2 0
Dolcoath	291	1634 18 0	Wh. Kitty	142	507 8 0
Fowey Consols	217	1113 13 6	West Wh. Jewel	95	678 12 0
South Wh. Basset	181	1179 16 6	Wh. Clifford	40	233 0 0
			Wh. Sparrow	13	73 2 6

Average standard, 129l. 3s.—Average produce, 8⅞.—Average price, 5l. 16s. 0d.—Quantity of ore, 2855 tons.—Quantity of fine copper, 188 tons 9 cwt.—Amount of money, 16,494l. 7s. 0d.—Average standard of last sale, 130l. 0s.—Average Produce, 6¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	235	1604 8 0
Vivian and Sons	946½	4967 8 3
Freeman and Co.	606½	4140 6 3
Sims, Willyams, Nevill, Druce, and Co.	349½	2174 8 9
Williams, Foster, and Co.	716½	3467 13 9
Total	2855	£16,494 7 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Par Consols, 312; Wheal Virgin, 328; Wheal Friendship, &c., 319; Fowey Consols, 309; Levant, 174; Treleigh Consols, 153; Bassley's Ore, 102; Providence Mines, 61; Wheal Curtis, 70; Wheal Providence, 64; Great Work, 62; Wheal Messer, 24; Wheal Spearm, 7.—Total, 2280 tons.

No sale on Thursday week, the 16th inst.

SALE OF COPPER ORES AT SWANSEA.

Sampled November 9, and sold December 1.

Mines.	Tons.	Produce.	Stand.	Price.	Mines.	Tons.	Produce.	Stand.	Price.
Santiago	60	22¼	97⅛	20 7 0	Chili	56	21⅞	99¼	19 2 6
ditto	70	24¼	97⅛	21 17 0	ditto	70	20	97⅛	20 2 6
ditto	74	24⅝	97⅛	21 16 0	Allihies	110	10⅝	116⅛	10 6 6
ditto	72	20	97⅛	22 1 0	Knockmahon	66	7⅞	124	7 7 0
ditto	60	23⅞	97⅛	22 16 0	Lackamore	73	7⅛	127	6 19 0
Cobre	153	13⅛	104⅞	11 10 0	Sygun	30	4	141⅛	3 9 0
ditto	91	13⅛	102⅞	11 10 0	ditto	21	3⅛	127⅞	3 3 0
ditto	90	22⅞	97	20 11 0	Phoenix	27	4⅛	141⅛	3 15 0
ditto	67	13⅞	102⅞	11 10 0	ditto	20	4⅞	130⅞	4 4 0
Chili	78	20	101	18 10 0	Laxey	48	3⅞	149⅞	2 16 0
ditto	79	21	100⅛	19 17 0	Chili	20	4⅛	115	3 4 6
ditto	64	21	101⅛	19 19 6	Llwyndu	17	3⅞	147⅛	2 14 6

TOTAL PRODUCE.

Santiago	360	£7980 17 0	Sygun	30	£209 2 0
Cobre	398	4088 6 0	Phoenix	47	166 3 0
Chili	228	6480 5 0	Laxey	48	126 16 0
Allihies	110	1130 15 0	Chili	20	130 17 6
Knockmahon	66	632 2 0	Llwyndu	17	46 6 6
Lackamore	73	501 5 0			

Total tons, 1557.—Total amount, £22,443 13 0.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
English Copper Company	57	£221 8 6
Freeman and Co.	165	2304 15 0
P. Grenfell and Sons	63	193 6 6
Sims, Willyams, Nevill, Druce, and Co.	60	920 15 0
Vivian and Sons	474	4443 12 0
Williams, Foster, and Co.	680	10[illegible] 17 0
Mines Royal Company	58	798 5 6
Total	1557	£22,443 13 0

Copper ores for sale December 8.—Cobre 99, ditto 97, ditto 65, ditto 62, ditto 60, ditto 105, ditto 90, ditto 40, ditto 40, ditto 5—Knockmahon 116, ditto 113, ditto 101, ditto 61, ditto 60, ditto 60, ditto 64—Allihies 121, ditto 60, ditto 60—Kenmare Ardtully 20, ditto 5, ditto 4.—Total, 1777 tons.

LATEST CURRENT PRICES OF METALS.

LONDON, DECEMBER 3, 1841.

	£ s. d.
Iron, Eng.—Bar ton	0 0 0 to 6 15 0
Do. Carg. in Wales	5 15 0
Hoops ton	9 0 0
Sheets ton	10 0 0
Pig, No. 1 ton	4 15 0
Do. in Wales	4 0 0
Foreign—Swedes, co. bd. ton	13 10 0
Duty 20s. per ton.—Russian com. ton	14 10 0
P.S.I. ton	15 10 0
C.C.N.D. ton	16 10 0
Steel, Eng. Blistered	25 0 0 to 45 0 0
Shear do. do.	45 0 0 .. 84 0 0
Cast do. do.	45 0 0 .. 84 0 0
Foreign—Duty 20 per cent.—Swedes in kgs bd. ton	19 0 0
Do. Faggots bd. ton	19 10 0
Milan bd. ton	0 0 0
Copper, Brit.—Cake ton	98 0 0
Tile do.	96 0 0
Sheets lb.	0 0 11½

	£ s. d.
Copper—Foreign (dy. 27s.)	—
Tin, Brit.—Blocks cwt	3 10 0
Bars do.	4 0 0
Banca	0 0 0 to 3 13 0
Straits	0 0 0 to 3 10 0
Tin Plates—I.C. (box)	1 10 0 to 1 12 0
I.X. do.	1 16 0 to 1 18 0
(Others in proportion.)	
Lead, Brit.—Pig ton	20 0 0
Sheet ton	21 0 0
Shot ton	22 0 0
Red ton	21 0 0
White (dry) ton	26 0 0
Do. (gd. in oil) ton	24l. a 28l.
Foreign—Span. (dy. 40s.)	20 0 0
Spelter	0 0 0 to 28 0 0
For delivery	0 0 0 to 27 0 0
English Sheets	49 0 0
Quicksilver—(dy. 1d. per lb.)	0 4 0

REMARKS.—The English iron market is firm; Swedish has risen from 12l. 10s. to 13l. 10s. per ton.—Swedes steel has also got up to 19l.—Banca tin has risen to 73s. per cwt.—Spelter for arrival next year has been done in quantities to-day at 27l.—In other metals no remarks.

EXPORTATION OF GOLD AND SILVER.—By the official return published by the Customs, the export of the precious metals from the port of London to foreign and colonial ports, for the week ending Thursday last, was as under:—

Silver coin to	Hamburgh	36,000 ounces.
„	Rotterdam	35,000 „
Silver bars to	Calais	150,000 „
„	Hamburgh	51,482 „
„	Rotterdam	38,000 „

CURRENT PRICE OF GOLD AND SILVER.

Foreign Gold in Bars .. per oz. £3 17 9	New Dollars .. per oz. £0 4 10
Portugal pieces .. 3 17 5	Silver in Bars (standard) .. 0 4 11⅞

PRICES OF MATERIALS IN CORNWALL

AS SUPPLIED AT THE PRINCIPAL MINES IN THE FOLLOWING MONTHS.

	5 & 6	7 & 8		5 & 6	7 & 8
Common iron, per cwt.	8s 14	7s 9d	Iron-wire sieves, each	2s 3d	2s 3d
Half-inch square ditto	9 1	8 9	Iron-wire work, per foot	1 6	1 6
Best tough whim chain	28 0	28 0	Board nails, per cwt.	17 0	17 0
Boiler plates	13 6	12 0	Half-board ditto, per 1000	5 0	5 0
Hoop iron	11 6	11 6	Hatch ditto	3 8	2 8
Nailrods	9 9	9 9	Half-hatch ditto	3 0	3 0
Miners' shovels	30 0	30 0	Linseed oil, per gallon	2 6	2 9
Charcoal iron	15 6	14 0	Rape ditto	3 10	3 10
Gunpowder, per 100 lbs.	40 0	40 0	Birch, per foot	1 8	1 7
Leather, per lb.	1 10	1 10	Pine	1 6	1 6
Coals, per ton, at quay	11 6	11 6	Sheet lead, per cwt.	21 0	24 0
Candles, per dozen lbs.	5 5	5 4	Barrow bends	11 6	11 6
Tallow, per cwt.	48 6	48 0	H 2 steel (112 lbs.)	36 0	30 0
Ropes	36 0	36 0	2s. nails	16 10	16 10
Flat ropes	46 0	46 0	Pick hilts	1 5	1 5
Hemp	0 4½	0 4½	Shovel hilts	2 0	2 2
White yarn, per cwt.	37 0	34 0	White ground lead	22 0	22 0
White rope	33 0	33 0	Red lead	26 0	26 0
Brass-wire sieves, each	3 8	3 8	Best rolled iron	11 6	11 6
Ditto machine	13 0	13 0	Blistered steel	40 0	40 0

** The figures at the top of the columns refer to months—as 1 Jan., 2 Feb., &c.

COAL MARKET, LONDON.

MONDAY.—Price of coals per ton at the close of the market:—Adair's Main 14 9—Buddle's West Hartley 18 6—Carr's 18 6—Chester Main 16 9—Ord's Redheugh 15—Pontop Windsor 14 6—West Hartley 19—Wylam 16 6—Wall's End Brown's 19—Clennell 17 6—Heaton 20—Hedley 19 6—Hotspur 18—Newmarch 16 6—Braddyll's Hetton 21 9—Heaton 21 9—Lambton 21 9—Pemberton 20 6—Stewart's 22—Caradoc 21 9—Adelaide 20 9—Bowburn 18 6—Evenwood 18—Seymour Tees 20—Tees Hetton 17 9—Tees 21—Blyth 16—Newton Main 17 3.—Ships arrived, 195.

WEDNESDAY.—Adair's Main 14 9—Bell Robson's Hartley 17—Chester Main 16 3—Old Tanfield 14 9—West Hartley 19—West Wylam 16—Wylam 16 6—South Pelton 13 9—Wall's End Braddyll's Hetton 21 9—East Heaton 19 9—Grange 18 9—Hetton 21 6—Lambton 21 6—Bentley's Hartlepool 20 6—Caradoc 21 9—Cassop 21 3—Hartlepool 21 6—South Wellington 15 6—Victoria Hartlepool 15—Bowburn 18 6—Clarence Hetton 17 9—Evenwood 18—Tees Hetton 21.—Ships arrived, 8.

FRIDAY.—Bell Robson's Hartley 16 6—Chester Main 15 9—Hoywell Main 19—Newcastle Hartley 14 6—Ord's Redheugh 14—Tanfield Moor Bute's 13—West Hartley 18 6—West Wylam 15 9—Wall's End Haswell 21 6—Hetton 21 3—Lambton 21 3—Shincliffe 21 3—Stewart's 21 6—Howard's Netherton Main 17.—Ships arrived, 21.

PRICES OF MINING SHARES.

Shares.	BRITISH MINES.	Paid.	Price.
500	Anglesey	5	—
4,000	Bissoe Bridge	5	1½
20,000	British Iron	60	65 dis
8,000	Blaenavon	45	20
120	Brewer	—	70
79	Budnick	—	90
1,000	Carn Brea	—	130
100	Copper Bottom	41	30
2,800	Cornubian Lead Co.	2	2
6,000	Cornwall Great United	10¼	1½
	Cuddra	10	¼
512	Cook's Kitchen	—	60
112	Charlestown	—	750
5,000	Dartmoor Consols	5	2
10,000	Durham County Coal Co.	37	9
2,400	Danescombe	—	2
6,000	De Dunstanville	—	—
1,800	Duffield	30	11
1,200	East Mulberry Hills	3½	1
256	East Pool	—	420
4,000	East Tretoil	1	½
3,200	Great Wh. Prosper	7½	6½
4,000	Great Wh. Charlotte	3	1½
16,000	Hibernian	12½	3½
1,000	Holmbush	14	43
2,000	Isle of Sark (Guernsey)	11	13
20,000	Mining Co. of Ireland	7	13½
6,000	Polbreen	4	1
3,000	Polberou Consols	10	½
2,000	Relistian	—	½
5,000	Redmoor Consolidated	5	1½
10,000	Rhymney Iron	50	9 9
100	Rosewall Hill	100	170
800	South Towan	10	1½
4,000	Tregollan	4½	1
4,000	Treleigh Consols	4½	4½ 5
4,505	Tamar Consols	3	1½

Shares.	BRITISH MINES.	Paid.	Price.
6,000	Tin Croft	6½	3½
4,300	Tretoil	1½	2½
1,000	Trevidgia	5	6
120	Treviskey and Barrier	—	150
96	Tresavean	—	1400
120	Trethellan	—	260
4,000	United Hills	5	6½
6,000	Wicklow Copper	5	13
3,845	West Wheal Jewel	9	3½
1,000	Wheal Julia	—	6½ ¼
128	Wheal Kitty	—	60
	FOREIGN MINES.		
5,000	Alten Mining Company	12½	9
10,000	Anglo Mexican Co.	100	¼
3,374	Do. Subscription	25	1
2,000	Bolanos	150	5
	Ditto Scrip	15	5
10,000	Brazilian Imperial	20	5
10,000	Bolivar	20	¼
10,000	Ditto Scrip	10	2
10,000	Cata Branca } Brazilian Co.	6½	7½
10,000	Conceiçao }	4	—
12,000	Cobre Copper Company	40	38½
8,500	Colombian Co. regis.	55	2
10,000	Copiapo Mining Co.	13½	9
20,000	General Mining Asso.	18	2
5,351	Mexican Company	50	2
12,000	Mocambas and Cocaes	25	3½ 4
14,582	Real del Monte, regis.	63½	3⅛
	Do. unregistered	—	1½
	Ditto Loan Notes	150	160
7,000	Royal Santiago	10	18
11,000	St. John d'el Rey	14½	2½
60,000	United Mexican	40	1
	Black Scrip, addl. capital	5	2
	Red New Scrip	5	3

RAILWAY SHARE LIST AND TRAFFIC RETURNS.

Line.	Entire Lgth.	Now Open.	Present actual cost.	Pd. on Share.	Val. of Share.	Last week's Returns.
Arbroath and Forfar Railway	15	15	£131,843	25	22	£240 5 3
Birmingham & Derby Junc.	48	38½	863,044	100	48 7½	1124 18 7
Birmingham and Gloucester	52½	51	1,612,723	100	36 5½	1280 4 5
Chester and Birkenhead	14½	14½	456,664	50	30	366 0 9
Dublin and Kingstown	6	6	333,990	100	77½	474 4 9
Dundee and Arbroath	16½	16¾	134,984	25	23	747 14 4½
Eastern Counties*	126¾	17½	1,476,179	23	7½ ½	641 6 10
Glasgow and Ayr	51	40	690,343	40	40	972 8 11
Glasgow and Paisley Joint	22½	22½	250,000	25	25	470 4 4
Gd. Junc. & Chester & Crewe	113½	113½	2,192,047	100	191 10	7378 16 9
Great North of England	73	40	1,000,000	90	65	1821 16 4
Great Western	118	118	5,250,044	65	80	9920 6 11
Hull and Selby	31	31	600,000	50	28½ 9	790 10 6
Lancaster & Preston Junc.	20½	20½	300,000	42½	37½	403 17 6
Liverpool and Manchester	31	31	1,410,000	100	199	4100 4 3
London and Birmingham	112½	112½	5,724,087	90	110 6½	12907 18 5
London and Blackwall	3½	3½	867,000	25	9½	337 6 6
London and Brighton }	46½	46½	} 2,066,500	50	38½ 5	1301 8 0
Ditto Shoreham Branch }	5½	5½				96 14 10
London and Croydon	10½	10½	557,000	18	11½	340 13 6
London and Greenwich	3¾	3¾	790,300	20	6½	724 10 10
London and South Western	93	77	2,293,857	39½	36 5½	4108 5 10
Manchester, Bolton, & Bury	10	10	779,936	25	35	345 18 11
Manchester & Birmingham	45	5	1,106,912	40	22	326 7 6
Manchester and Leeds	50	50	2,839,399	70	65	3750 13 4
Midland Counties	57	57	1,440,790	100	59½ 1½	2136 1 8
Newcastle and Carlisle	60½	60½	750,000	100	90	1164 10 7
Northern and Eastern†	33½	33½	850,913	30	23½ ½	824 15 6
North Midland	72½	72½	2,929,087	100	64½ 5	2079 3 6
North Union‡	23	23	550,700	75	73½	835 7 6
Preston and Wyre	19½	19½	270,000	50	30	116 14 6
Ulster	25	9	230,340	22½	—	240 4 6
York and North Midland	29	29	445,360	50	47	1466 13 6

* Including Northern and Eastern Railway toll. † Rent and toll to Eastern Counties (about 130l. per week) included in the returns. ‡ The Liverpool and Manchester toll is deducted.

London: Printed and Published by Henry English, the Proprietor, at his Office, No. 37, New Broad-street, in the city of London; where all Communications and Advertisements are requested to be forwarded, post-paid. [Dec. 4, 1841.